# PUTTING SCIENCE BEHIND THE STANDARDS

*A scientific study of viewability and ad effectiveness*

**IPG MEDIA LAB**  CADREON  Integral Ad Science

# EXECUTIVE SUMMARY

The concept of when an ad should be counted as "viewable," what effects various levels of viewability have on users, and how to pay for these varying levels has been hotly debated. Integral Ad Science's Q3 2015 report found that only 43% of ads are currently considered viewable according to the Media Ratings Council's (MRC) viewability standards and, to date, these viewability levels have not been scientifically correlated with actual ad effectiveness measures. The IPG Media Lab partnered with Integral Ad Science and Cadreon to conduct a large scale scientific research study, meant to quantify the relationship between viewability and brand metrics. This research also investigates other optimization scenarios that could help elevate the impact of ads at lower levels of viewability. Although the study is not meant to rewrite existing standards, it serves as a guide to advertisers and publishers alike regarding how best to make ads more effective given viewability standards.

## TO FILL IN SOME OF THESE BLANKS, WE EXPLORED THE FOLLOWING QUESTIONS:

*1.*

*What value do ads that meet the MRC minimum viewability standard offer?*

*2.*

*What is the relationship between viewability of an individual ad and ad effectiveness?*

*3.*

*How can marketers get the biggest bang for their buck?*

## KEY TAKEAWAYS:

While the MRC standard is not a magical threshold for ad effectiveness, viewability is highly related to ad effectiveness. As viewability increases, so does consumer attention and ad recall.

Some ads that do not meet MRC standard requirements do have impact, and some that exceed standard requirements do not. Because the standards are two-dimensional (time and percent in view), different combinations of whether or not one or the other is above, at, or below the standard influences ad effectiveness.

Time in view is king. When it comes to moving the dial on ad effectiveness, the number of pixels in view is not the driving factor - how long consumers have to see the ad is.

To raise the impact of your ads even when they are not fully viewable, there are effective tactics you can employ.

# METHODOLOGY

## Experimental Design

We recruited U.S. consumers from a nationally representative online panel (N = 9,876) into an online survey. Participants who were chosen because they fit brand target definitions were then randomized into 1 of 189 viewability test cells. These test cells included various combinations of viewability (split by differing levels of time in view and percent in view), ad type (standard banner, large format ads, or video ads), industry vertical (2 different brands were tested), logo placement, contextual relevance of the ad on the page, amount of ad clutter on page, and/or audio level, as displayed in Table 1. Based on a pre-survey, participants were given experiences that matched their own consumption habits. There was also a control group who was shown no ad per industry. Although distribution was controlled for through the randomized test cell placement, any discrepancies that would bias the data analysis were then translated into data weights to ensure a fair analysis.

*Table 1*
## VARIABLES INCLUDED IN TEST CELLS

| PERCENT IN VIEW | TIME IN VIEW | AD TYPE | INDUSTRY VERTICAL | LOGO PLACEMENT (STD BANNER ONLY) | AUDIO (VIDEO ONLY) | SHARE OF VIEW (STD BANNER ONLY) | CONTEXTUAL RELEVANCE (STD BANNER ONLY) |
|---|---|---|---|---|---|---|---|
| 25% (STANDARD BANNER AND VIDEO ONLY) | .5 SEC | STANDARD BANNER AD | CPG | TOP | ON | 1 OF 1 ADS | IN CONTEXT |
| 30% (RICH MEDIA ONLY) | 1 SEC | RICH BANNER AD | AUTO | NOT AT TOP | OFF | 1 OF 2 ADS | OUT CONTEXT |
| 50% | 2 SEC (VIDEO ONLY) | VIDEO BANNER AD | | | | 1 OF 4 ADS | |
| 75% | 4 SEC | | | | | | |
| 100% | 7 SEC | | | | | | |
| | FULL EXPOSURE | | | | | | |

We scientifically controlled for viewability by having the ad rotate out after the designated time in view, and having the ad fixed on the page such that there was never more or less of the designated percent in view. In total, we included percent in view levels of 25%, 50%, 75%, and 100% for video and standard banner ads. For large format ads, we included 30%, 50%, 75%, and 100%, since their MRC standard was different for percent in view. For large format ads and standard banner ads, we included a time in view of .5 seconds, 1 second, 4 seconds, 7 seconds, and full exposure (the ad is fully in view for as long as the user wants to be on the page). For video ads, we included test cells of 1 second, 2 seconds, 4 seconds, 7 seconds, and full exposure, since their MRC standard for time in view was also slightly different. All video ads tested were pre-roll, audio-on.

All participants then answered a post-exposure survey to measure branding impact. Additionally, we ran a separate eye-tracking measurement on select viewability test cells to obtain quantitative information regarding how the page content was viewed, including when ads were first viewed, for how long, and how many times. These respondents turned on their webcams and eye-tracking software tracked their eye movements throughout the test.

## Modeling and Statistical Testing

A one-way ANOVA was run to test group significance for each brand metric outcome by the variable of interest against the control. Subsequent post-hoc testing was then run through SPSS to determine the exact significance of each test cell. Statistical significance was measured at the ≥ 90% confidence level.

We also ran logistic regressions to determine the level of impact different viewability levels have on our binomial brand metrics, keyed to the control group. The propensity score was calculated using these regression coefficients to determine outcome probabilities for various viewability combinations.

# RESULTS

## 1.

*What value do ads that meet the MRC minimum viewability standard offer?*

When we look at the combined results of standard banner ads, large format ads, and video ads, we find that if an ad exactly meets the minimum MRC standard (Table 2) it does not significantly impact brand metrics. However, although the MRC standard does not appear to be a magical threshold for ad effectiveness, viewability is still highly related to ad effectiveness. When we look at the two dimensions of the standard: time in view and percent in view, as they relate to ad effectiveness with the other controlled, there is a distinct rise with viewability. Specifically, after meeting the MRC standard for each dimension, ad effectiveness dramatically improves, as seen in Graphs 1 and 2.

*Table 2*
## MRC STANDARDS FOR VIEWABILITY



**At least 50% in view**
For a minimum of 1 second

**STANDARD BANNER ADS**



**At least 30% in view**
For a minimum of 1 second
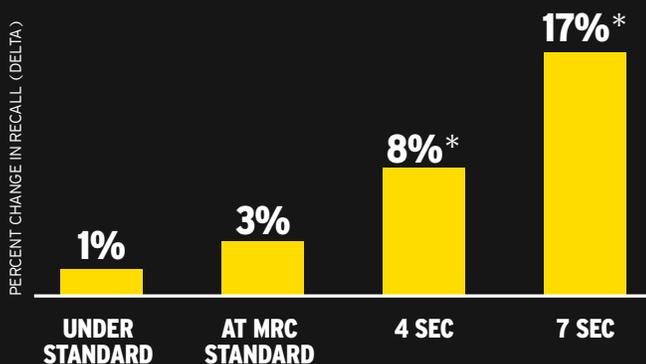
**RICH MEDIA/LARGE FORMAT ADS**



**At least 50% in view**
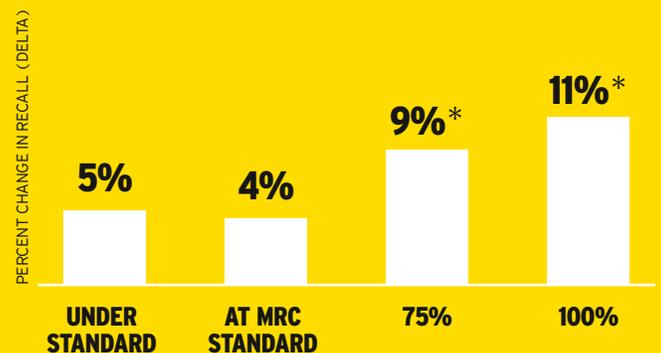For a minimum of 2 consecutive seconds

**VIDEO ADS**

*Graph 1*
## AD RECALL BY TIME IN VIEW

PERCENT CHANGE IN RECALL (DELTA)

- UNDER STANDARD: 1%
- AT MRC STANDARD: 3%
- 4 SEC: 8%*
- 7 SEC: 17%*

(Averaged delta for all ad types)

*Graph 2*
## AD RECALL BY PERCENT IN VIEW

PERCENT CHANGE IN RECALL (DELTA)

- UNDER STANDARD: 5%
- AT MRC STANDARD: 4%
- 75%: 9%*
- 100%: 11%*

(Averaged delta for all ad types)

* Statistically significant difference between control and test at >=90% confidence.
% in view under the MRC standard excludes large format ads since it was not tested.

## 2.

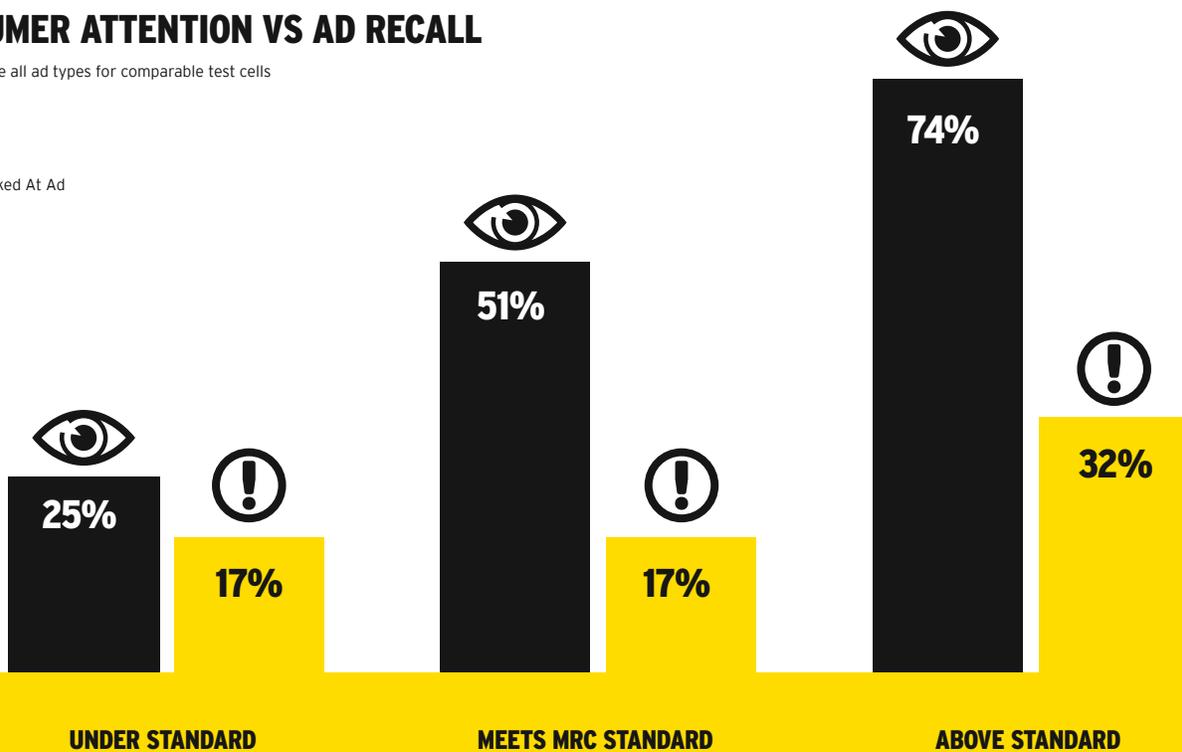*What is the relationship between viewability of an individual ad and ad effectiveness?*

Graphs 1 and 2 showed us that ad effectiveness does increase with viewability. When we let consumers experience the ads in a normal consumer-driven experience, recall measures were quite high – so we know these ads are working. We also saw that basic consumer attention, as measured by our eye tracking data, increased with viewability. However, when we compared the two outcomes, we found that consumer attention does not necessarily correlate well with ad effectiveness (Graph 3). Even though more people may glance at the ad, it does not guarantee that it is being internalized. Especially if, at lower viewability levels, consumers are not able to discern identifying information about the ad, it follows that they will not be able to remember it.

*Graph 3*
# CONSUMER ATTENTION VS AD RECALL

Results include all ad types for comparable test cells

**%** Who Looked At Ad

**%** Ad Recall

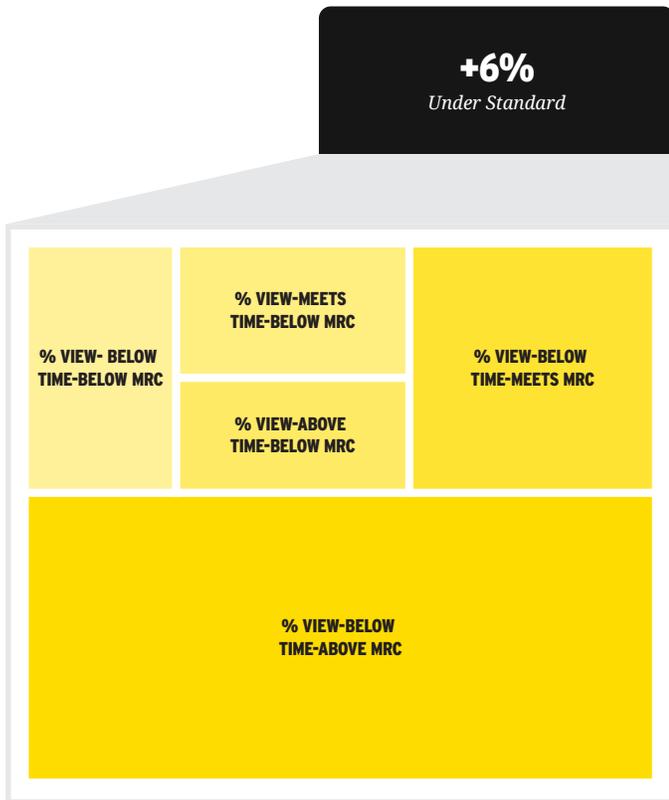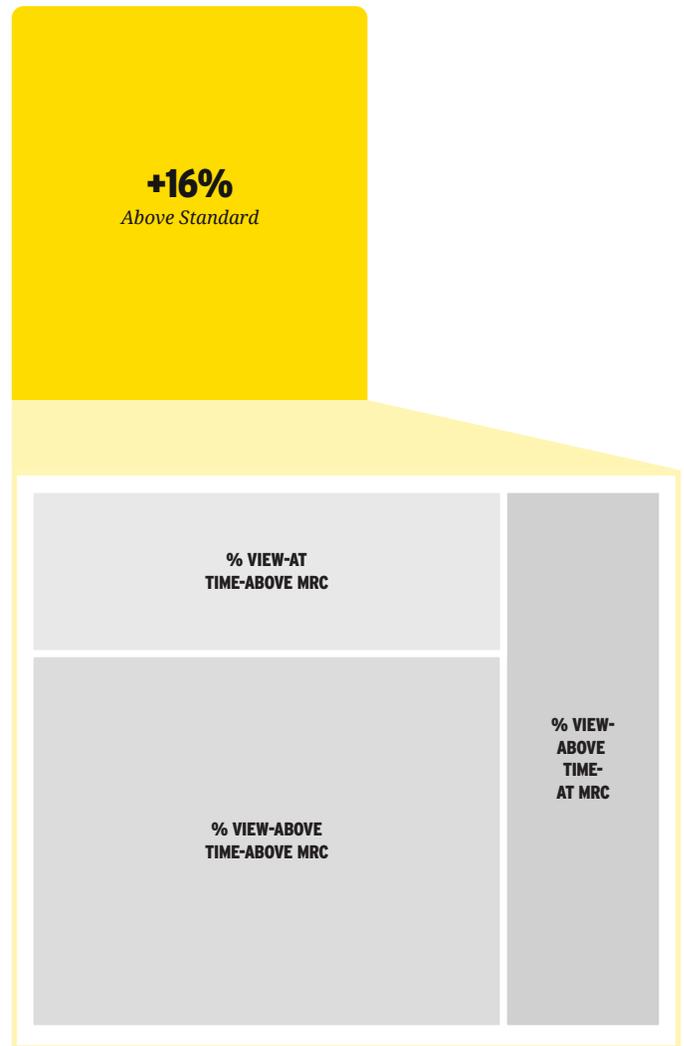| | | |
|---|---|---|
| 25% | 51% | 74% |
| 17% | 17% | 32% |
| **UNDER STANDARD** | **MEETS MRC STANDARD** | **ABOVE STANDARD** |

We did find that exceeding the MRC standards unsurprisingly has a significant impact on ad recall, with a recall level of 16%. What may be surprising, though, is that ads with viewability under the MRC standard (did not meet at least one viewability criteria), are significantly impactful against both the control and ads at the standard, with a recall of 6%. Since this result was unexpected, we dug a little deeper.

We found that because the MRC standard consists of two dimensions, if the time dimension is above standard while the pixels in view are below standard, there is still a significant impact on ad recall (as seen in Graph 4). It follows then, that not all ads that are above the standard (one dimension is above standard while the other is at or above) are significant. Graph 5 shows that when time in view is only at the standard – even if the percent in view is above, the ad recall impact is not significant.

*Graph 4*
## BELOW MRC STANDARD BREAKOUT BY EFFECT ON AD RECALL

*Graph 5*
## ABOVE MRC STANDARD BREAKOUT BY EFFECT ON AD RECALL

**+6%**
*Under Standard*

% VIEW- BELOW
TIME-BELOW MRC

% VIEW-MEETS
TIME-BELOW MRC

% VIEW-ABOVE
TIME-BELOW MRC

% VIEW-BELOW
TIME-MEETS MRC

% VIEW-BELOW
TIME-ABOVE MRC

**+16%**
*Above Standard*

% VIEW-AT
TIME-ABOVE MRC

% VIEW-
ABOVE
TIME-
AT MRC

% VIEW-ABOVE
TIME-ABOVE MRC

For the most part, all of these results hold true for standard banner, large format ads, and video ads. The most notable difference is that videos only require 75% in view to have maximum impact. Because they are a more visually stimulating form of advertising, this makes sense. Tables 3-5 show the percent chance of an ad being effective at each tested viewability level, divided by ad type. Here, there are also some important differences. For banner ads, to achieve at least a 25% chance that the ad will be effective, 4 seconds are really required, regardless of percent in view. Large format ads require higher viewability to move the dial, with 7 seconds of viewability making the biggest difference. The predicted chances for video ads being effective are similar to banner ads', although at low viewability levels, videos have a hard time breaking through.

For large format ads and video ads, the struggle at lower viewability levels is likely because of the lack of immediately visible identifiable information. We found that large format ads had especially low results at lower levels of viewability, which was, at first, surprising. Although, further investigation indicated that it was most likely the result of the creative. All of the large format ads tested did not have branding or identifiable information until much higher viewability levels were reached (after a few seconds and with more pixels in view). Likely because large format ads are such an open format, some standard advertising rules (such as having logo at the top/branding earlier) are not followed as strictly – resulting in some decreases in effectiveness. For video, we found that the best results occurred after a longer period in view, since around the 4-7 second mark is when branding first appears in these video ads. This suggests that earlier branding practices are still quite important for open ad formats.

**TIME IN VIEW**

| | 0.5 Sec | 1 Sec | 4 Sec | 7 Sec |
|---|---|---|---|---|
| 100% | 20% | 21% | 32% | 38% |
| 75% | 16% | 21% | 25% | 31% |
| 50% | 19% | 19% | 24% | 30% |
| 25% | 21% | 21% | 25% | 29% |

**PERCENT IN VIEW**

*Table 3*
## PREDICTED CHANCE CONSUMERS WILL RECALL STANDARD BANNER AD

- *19% chance of recall at the standard*

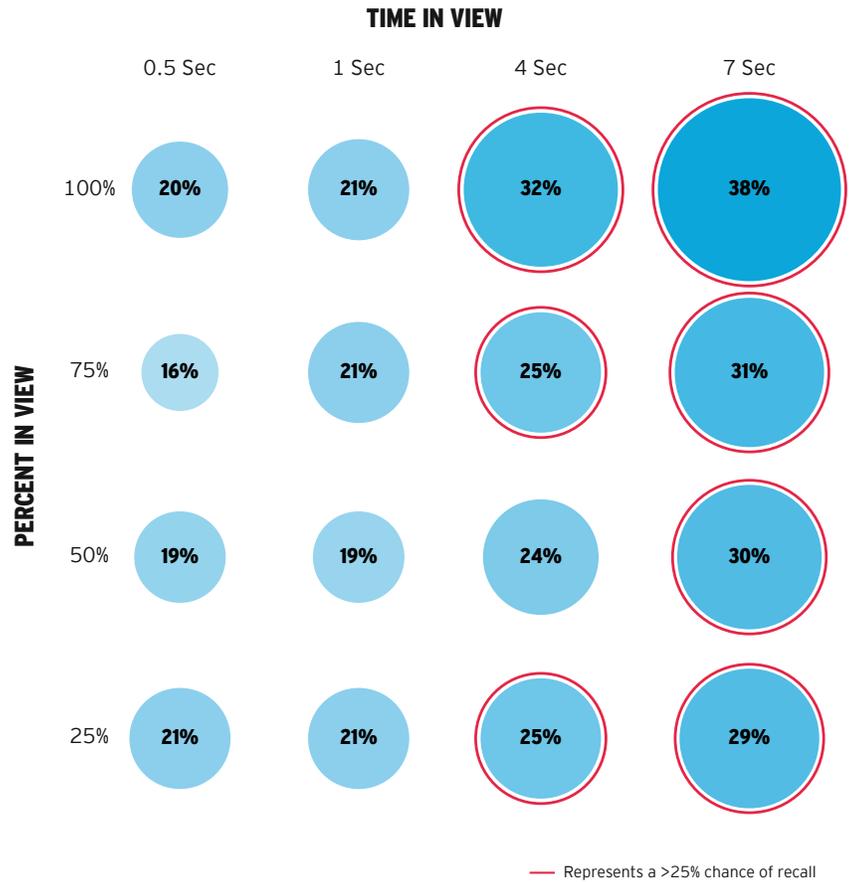- *% chance over doubles from lowest to highest viewability*

— Represents a >25% chance of recall

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**TIME IN VIEW**

| | 0.5 Sec | 1 Sec | 4 Sec | 7 Sec |
|---|---|---|---|---|
| 100% | 22% | 19% | 32% | 39% |
| 75% | 14% | 21% | 21% | 35% |
| 50% | 11% | 11% | 18% | 25% |
| 30% | 18% | 17% | 15% | 13% |

**PERCENT IN VIEW**

*Table 4*
## PREDICTED CHANCE CONSUMERS WILL RECALL LARGE FORMAT AD

- *17% chance of recall at the MRC standard*

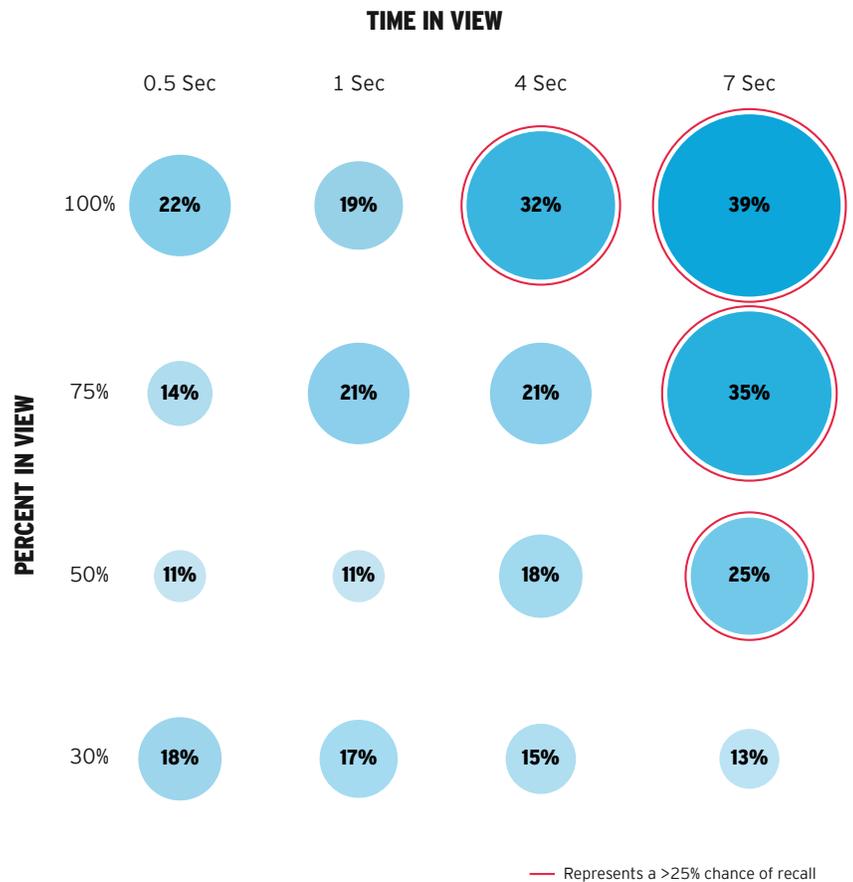- *% chance over doubles from lowest to highest viewability*

— Represents a >25% chance of recall

Results based on propensity scores generated through regression modeling

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## TIME IN VIEW

| | 0.5 Sec | 1 Sec | 4 Sec | 7 Sec |
|---|---|---|---|---|
| **100%** | 8% | 12% | 32% | 30% |
| **75%** | 13% | 13% | 25% | 34% |
| **50%** | 12% | 10% | 24% | 34% |
| **25%** | 9% | 17% | 10% | 26% |

**PERCENT IN VIEW**

— Represents a >25% chance of recall

*Table 5*

# PREDICTED CHANCE CONSUMERS WILL RECALL VIDEO AD

- *10% chance of recall at the MRC standard*

- *% chance over triples from lowest to highest viewability*
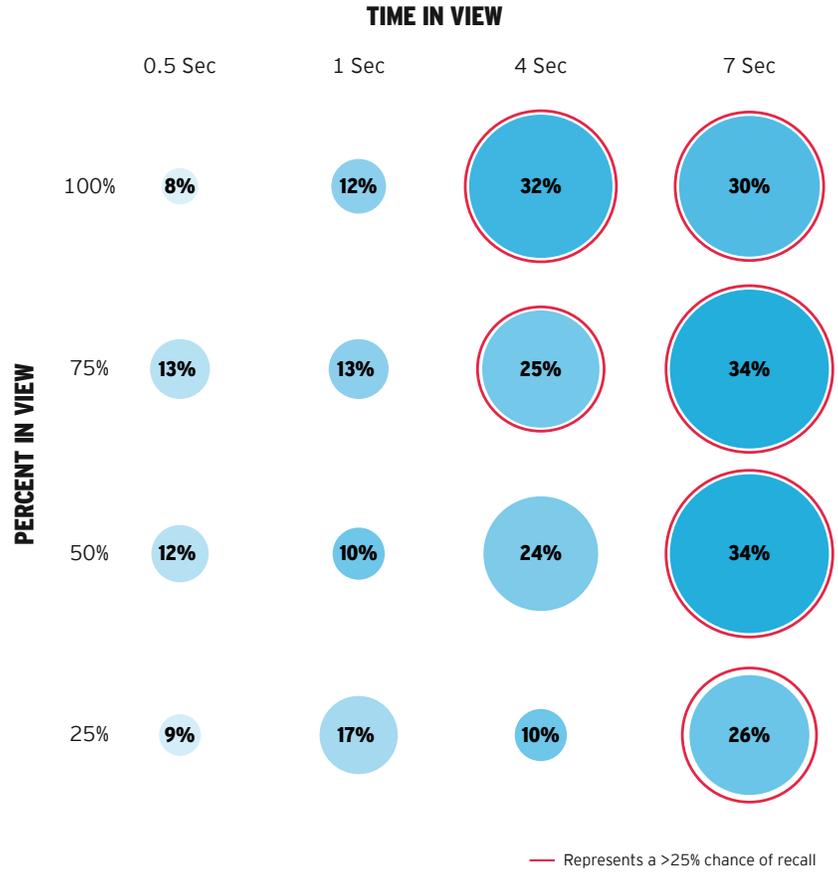
# WHAT WE SEE REPEATEDLY FROM THESE RESULTS IS THAT TIME IN VIEW IS KING.

Overall, when percent in view is lower but time in view is higher than the standard, there is still a significant 10.4% ad recall. Compared to a non-significant recall when percent in view is higher than the standard and time in view is lower, there is an important distinction. Our regression modeling confirmed this conclusion: time in view is responsible for most of the variance in ad effectiveness metrics. It is a much better predictor of whether or not a consumer will be able to remember the ad compared to what percent of the ad was in view. Lastly, when we tracked consumer attention using eye tracking data, consumers' attention increased only with the time the ad was in view – not the percent visible. Consumers desperately need more time to see the ad in order to connect to it.

Results based on propensity scores generated through regression modeling **IPG MEDIA LAB**

## 3.

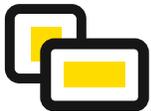*How can marketers get the biggest bang for their buck?*

### 1.

**USE VIDEO ADS, PRIORITIZING AD SPACES WHERE AUDIO IS LIKELY TO BE ON.**

The study found that having audio on even provides a 175% lift in recall for ads that fall under the MRC standard.

### 2.

**LOGO**

**ENSURE THAT THE LOGO IS IMMEDIATELY VISIBLE.**

We found that placing the logo at the top of an ad results in large increases in effectiveness after the MRC standard for both time and percent in view. Early branding is also an important strategy for open ad formats less likely to follow standard practices, like large format ads.

### 3.

**AIM FOR AD SPACES THAT ARE LESS LIKELY TO BE CLUTTERED WITH OTHER ADS.**

We tested ad spaces where there was one, two, or four ads on the page to see whether the clutter affected the effectiveness of our test ad. Being the only ad on the page significantly raises both ad and message recall, and begins working after impressions reach the MRC standard. As soon as any clutter is added to the page, the results are no longer significant.

### 4.

**PLACE ADS IN PLACES THEY ARE LIKELY TO BE VIEWED FOR A LONGER PERIOD OF TIME, REGARDLESS OF THEIR PERCENT IN VIEW (E.G. OUT-STREAM, EMAIL, ETC.).**

The advertising community has long placed most of the importance on how many pixels of the ad are in view at any given time. However, perhaps some of that importance is misplaced. What really drives consumer attention is the time that they have to see the ad in the first place.

*We did also test whether or not ads that are placed next to contextually relevant content are more effective than those placed next to out-of-context content. We were not able to find that contextual relevance influences ad effectiveness. Although some in market studies have found boosts from contextually relevant placement, we theorize that this could be due to the inherent audience differences different contexts attract, while our research controlled for demographic differences.

# CONCLUSION

## WHILE SOME IMPRESSIONS UNDER THE STANDARD MIGHT HAVE IMPACT, WE ALSO MUST CONSIDER THAT THE MRC REPORTS A 77.2% CHANCE THAT ALL ADS THAT MEET THE STANDARD WILL EVENTUALLY EXCEED IT TO REACH 100% OF PIXELS IN VIEW. IN THE REAL WORLD, VIEWABILITY IS A MOVING TARGET.

We know that ads that exceed the standard have the highest effectiveness, so it is an important diagnostic metric.  If we really wanted to tie viewability with ad effectiveness, the advertising community could employ the method of paying different amounts for varying levels of viewability; however, this would be extremely difficult to implement on a large scale across established platforms.

What is most important is that we do not lose of sight of the purpose of the MRC viewability standards. The original intention of the MRC standards was not to guarantee ad effectiveness, but to ensure ads have the opportunity to be seen. The effectiveness of the creative ultimately rests in the hands of the creative and targeting strategy. Viewability is an important metric for advertisers, but perhaps it is not a KPI. What is most important for advertisers to consider based on this research is 1. The different strategies listed in the previous section during ad creative development and 2. The often ignored importance of the duration of a consumer exposure when ad placement is being selected.