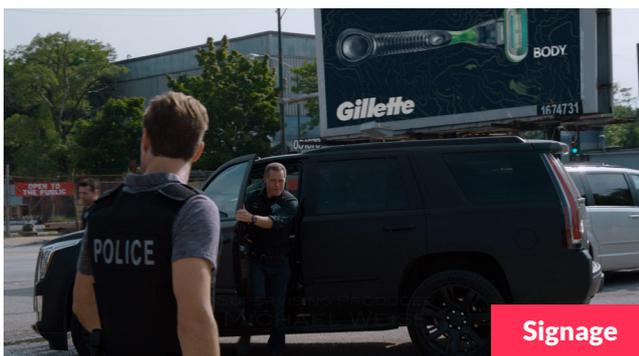
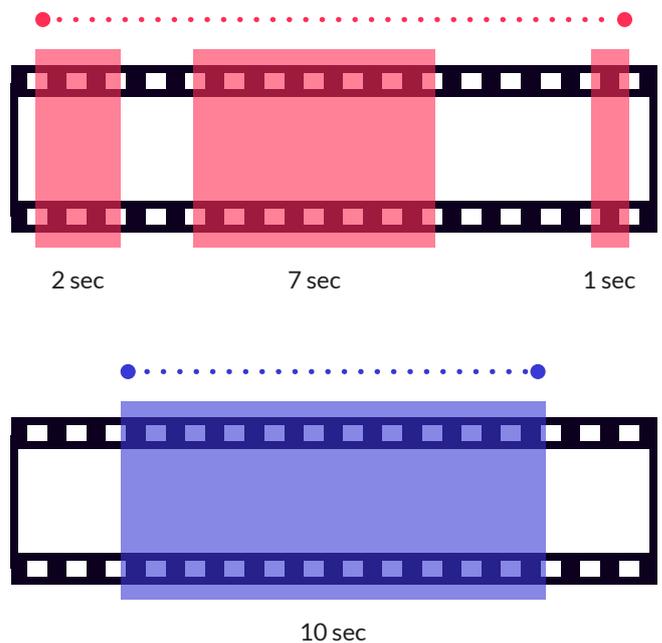


Assessing and Evaluating Mirriad's Visual Impact Score

As consumers increasingly find ways to avoid traditional advertising through new technologies, like ad blocking and other ad avoidance techniques, advertisers and marketers are seeking new and creative ways to connect with their audiences. Advances in advertising technology have paved the way for new ad formats that allow advertisers to deliver branded messaging and products through in-video advertising. Because these branded exposures are embedded in the content, advertisers do not need to worry about ad avoidance, and can instead feel confident that the ads they are paying for are viewable by their target audiences.

Mirriad has pioneered a new Ad Unit, called the Mirriad In-Video Ad Unit, which is defined as 10 seconds of guaranteed quality brand exposure in long-form video. The exposure can be consecutive or split in non-consecutive instances.

Mirriad In-Video Ad Unit = 10 Seconds



Signage



Product

These new formats offer a combination of signage and product and may contain brand messaging to reinforce impact. They are scalable across entire programs, episodes and markets, differing from other forms of advertising, such as traditional product placements.

In order for advertisers to adopt usage of these new ad formats, they must be able to assess quality and impact of these Ad Units. As such, a third-party assessment of the new measurement approach is required to establish trust, transparency and consistency.

This paper describes the Mirriad In-Video Ad Unit, the measurement approach used by Mirriad to determine its quality, and the results of an evaluation by comScore of one recent Mirriad campaign.

Mirriad's Visual Impact Score

Mirriad has developed a set of measures that ensure a high-quality standard for a 'billable' In-Video Ad Unit. Each measure has a set of parameters and weightings that are tuned to deliver a guaranteed quality exposure. These measures are combined to create a Visual Impact Score (VIS). The VIS must achieve a defined value for an In-Video Ad Unit to be billable. The scoring function generates a fractional score between 0 and 2. Any segment scoring above a 1 is deemed 'billable' and those scoring below a 1 are discarded.

In order for a Mirriad In-Video Ad Unit to qualify for VIS measurement, it must pass three gating criteria:

1. Minimum exposure

Any segment of under a second of exposure is ignored.

2. Percentage of on-screen visibility to be above the predetermined threshold comprised of a pre-trigger starting the measurement, a main trigger and a post trigger used for the remainder of the episode.

3. Sharpness

Relative to size, must be above a predetermined threshold

Once an Mirriad In-Video Ad Unit passes the gating criteria, the VIS score is calculated based on the following key parameters:

- **Exposure size relative to screen**

- **Prominence**

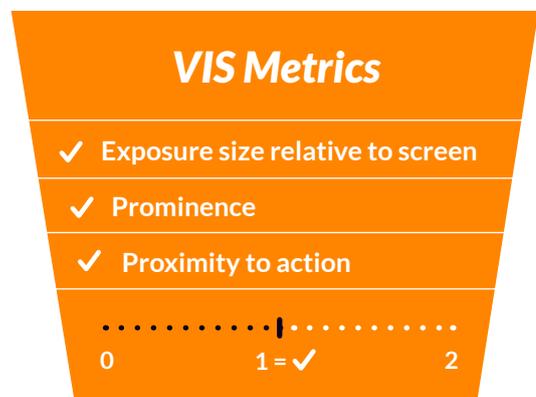
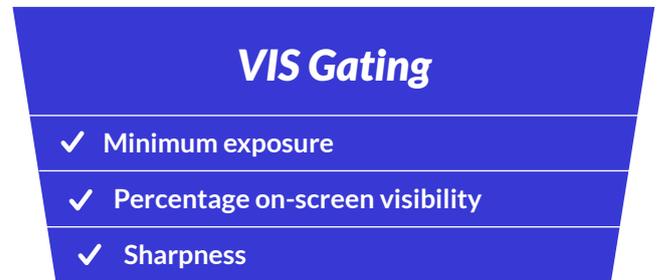
A measure of visibility of an embedded brand relative to a scene and surroundings

- **Proximity to action**

A measure of closeness to the main action in a scene

Each exposure within a 10-second Ad Unit is assessed using the above VIS factors, which are calculated for each exposure segment.

Branded Frames



Billable Ad Units



Ad Effectiveness Research



Billable Ad Units
with proven ad effectiveness

comScore's Evaluation of VIS

Mirriad engaged with comScore to develop and execute an independent evaluation. comScore was selected to conduct this analysis based on a variety of factors, including but not limited to:

- comScore's 13+ years of leadership in the branded entertainment measurement space and independent position in the ecosystem
- The company's capacity to statistically process against high volume campaigns
- Its ability to offer proven, extended research enhancements, such as creative content evaluations and full campaign analysis, to help clients best understand the what, how, where, and why of in-video advertising impact and success.

Objective

The objective of the analysis was to study a random sample of Mirriad In-Video Ad Units from a recent campaign. The purpose was to create an approach comparing a random sample of Mirriad's VIS to a referential comScore standard, thus creating a system to evaluate Mirriad's "billable" in-video Ad Units on an ongoing basis.

Summary

In order to understand the VIS, comScore performed a detailed analysis on a sample of Mirriad In-Video Ad Units with the goal of determining if Mirriad's VIS aligned with comScore's independent referential standard. The results would provide the groundwork for a potential sample-based evaluation system to measure Mirriad In-Video Ad campaigns moving forward.

Research Method

For the purposes of this initial research, comScore employed a multi-pronged testing approach.

The following steps occurred:

- Mirriad provided comScore with 809 Ad Units and corresponding VIS data from a recent Mirriad In-Video Ad campaign representing all the Ad Units billed in this particular campaign
- comScore randomly sampled 261 of these Ad Units for analysis
- comScore scored the 261 Ad Units using its branded content classification system

Statistical Results

Exploratory data analysis was used to contrast, compare, and understand the similarities, differences, and relationship between comScore's metrics and Mirriad's VIS for this campaign.

The analysis uncovered three key findings:

Finding 1

Both the VIS and comScore reference standard are not normally distributed

The null-hypothesis of the Shapiro-Wilk test is that the population is normally distributed. If the p-value is less than the chosen alpha level, then the null hypothesis is rejected and there is evidence that the data tested are not from a normally distributed population. In this case both metrics do not represent normally distributed populations of scores, but are consistent in form to each other.

Shapiro-Wilk Test: .10 Sig (alpha) Level

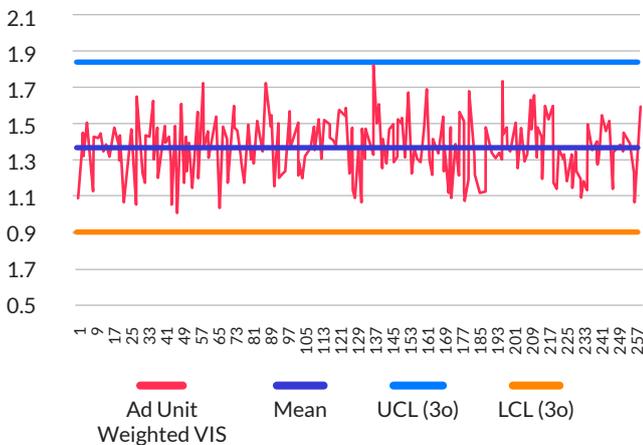
Metric	Statistic	Df	Significance (p-value)
comScore	.869	261	.000
VIS	.990	261	.086

Finding 2

The VIS sample data was consistent for the subject campaign

The VIS scores for the sample were plotted on a control chart. Given that the sample VIS scores were evenly distributed around the mean and did not exceed upper and lower limits, it can be seen that the VIS sample data reflected consistency, which is an important characteristic for this type of metric.

VIS Control Chart

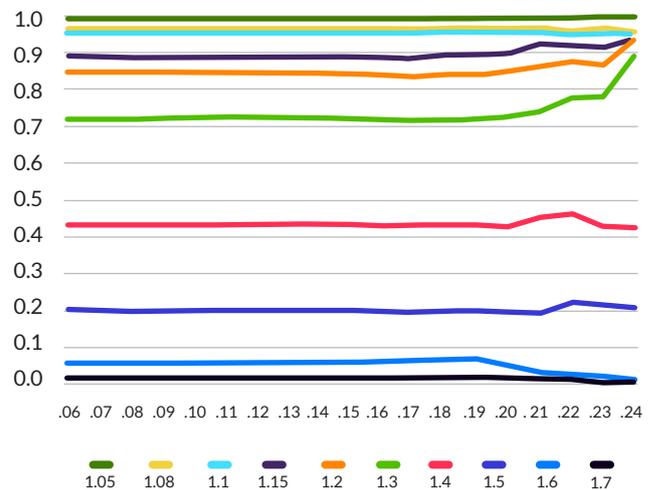


Finding 3

98.5% of the tested Mirriad In-Video Ad Units passed the independent comScore reference standard based on statistical tests

Filtered correlation was used to test each Mirriad In-Video Ad Unit's VIS against a transformed range of comScore's independent evaluation and score. The results were positive. 98.5% of Mirriad's In-Video Ad Units passed the independent comScore reference standard. A step (function) test supported comScore acceptability thresholds across all levels of results for this sample campaign.

Step Test



Conclusion

comScore, through its own branded content classification system, has studied a random sample of Mirriad In-Video Ad Unit quality metrics (VIS) from one recent campaign to confirm that a process of objectively evaluating "billable" in-video Ad Units is feasible. Beyond this initial study, an ongoing assessment of a sample of Mirriad ad campaigns could provide advertisers objective and independent assurance that

Mirriad's In-Video Ad Units are being regularly checked by an independent third party. As a result of this research and overall approach, comScore is in a position to perform ongoing analyses of Mirriad's future in-video ad campaigns. When deployed, this will provide independent and objective information demonstrating Mirriad is delivering what it promises to advertisers via the VIS metric.