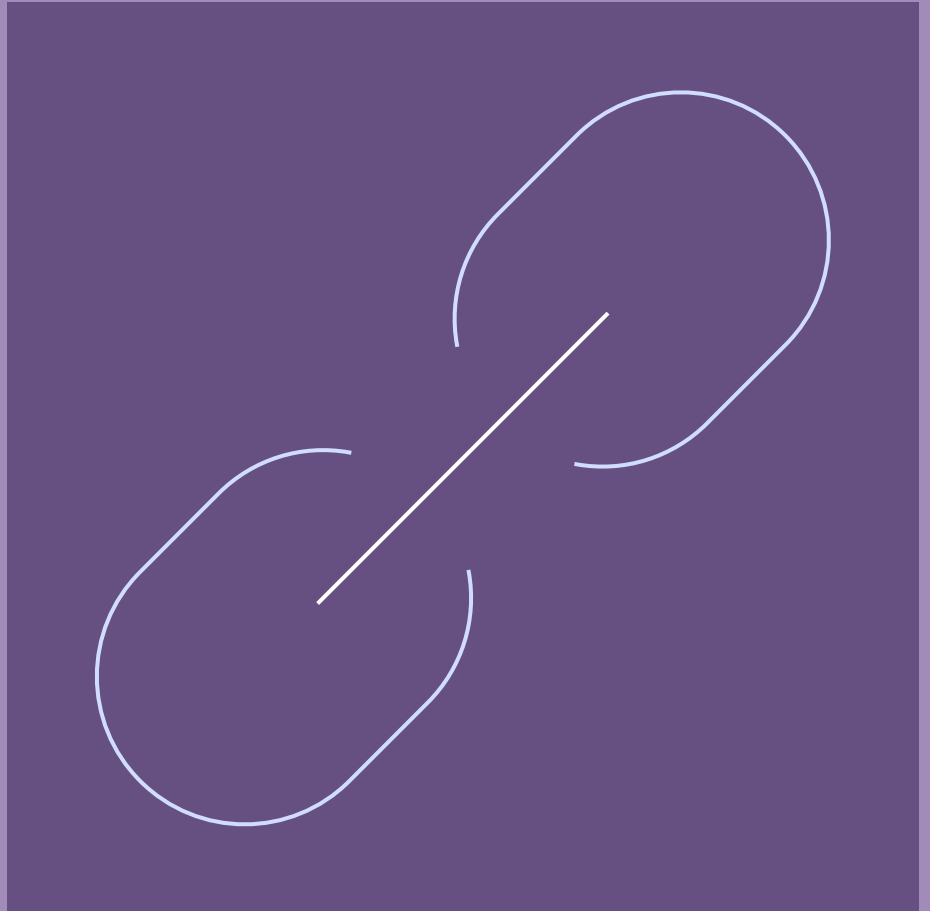


THE LINK
BETWEEN
ATTENTION
METRICS
& OUTCOMES



The Attention Council aggregated research from more than 50 case studies that looked at the link between attention and outcomes throughout the funnel.

This paper guides readers through a meta-analysis of case studies that connects attention metrics with outcomes, and provides actionable strategies to prove the connection between attention and outcomes for their own brands.

Finally, we share our point of view on the long-term impact of a generalizable connection between attention metrics and outcomes on the digital media industry.

A GROWING BODY OF EVIDENCE BY CATEGORY

The Outcomes Working Group studied over 50 cases that connect attention metrics to various types of outcomes. The attention metrics varied from eye-tracking to synthetic media metrics, and the outcomes spanned the full funnel, from recall to sales lift. Comparisons were made to the performance of existing media metrics like viewability and completion rate, with overwhelming evidence proving the benefits of attention metrics.

A note about how “attention” is defined:

The studies below utilize various definitions of attention.

Some used eye gaze duration in a lab or real-world setting with on-device cameras, while others leveraged eye-tracking hardware in living rooms or browser-based proxies for attention measurement in the wild.

In each case, we have tried to specify how attention was measured.

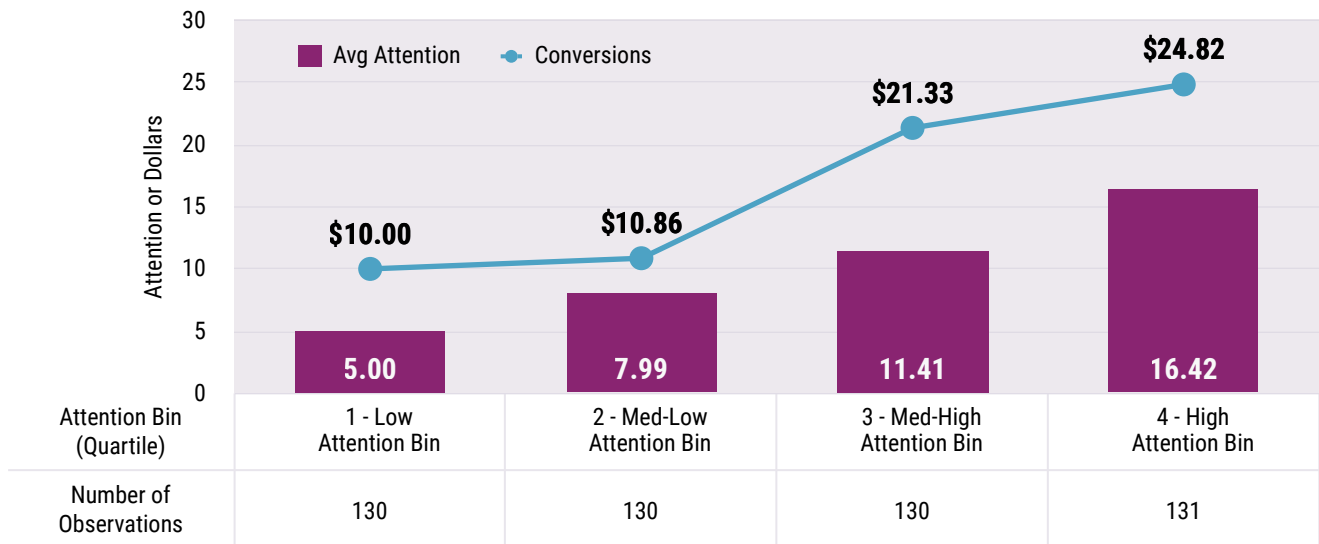


Financial Services

Within the financial services and insurance vertical, we cataloged numerous studies across clients with both upper and lower funnel KPIs, including brand lift, sales lift, and ad recall. Ultimately, our body of research found positive correlations between each of these outcomes and highly attentive media.

For a multinational financial services company with lower funnel outcomes, research indicated a very strong positive correlation (.94 correlation coefficient) between attention and lower funnel action per impression. High attention media drove 2.5X the number of transactions for the bank compared to low attention media.

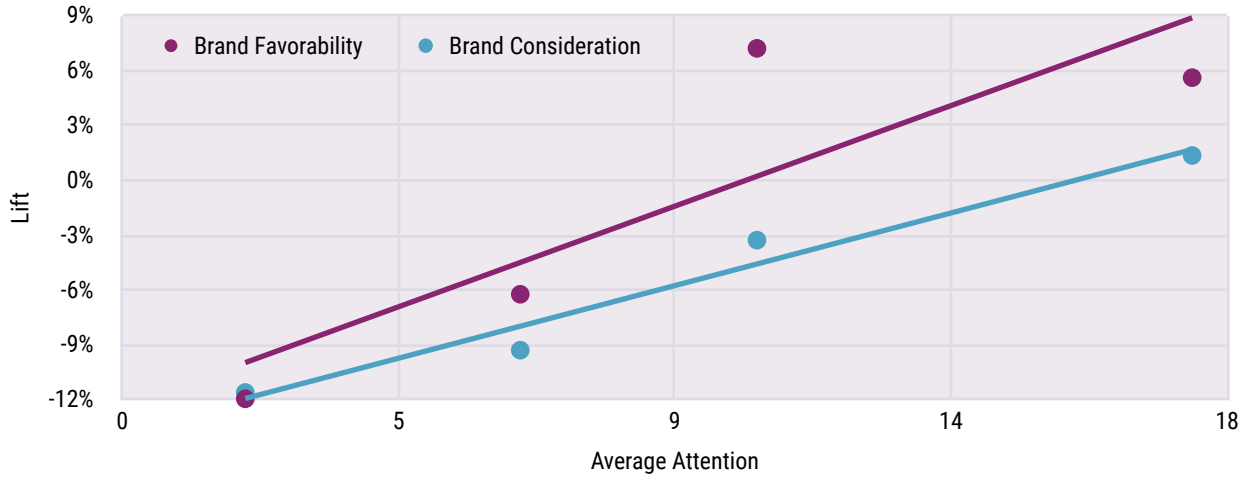
Attention vs. Conversions



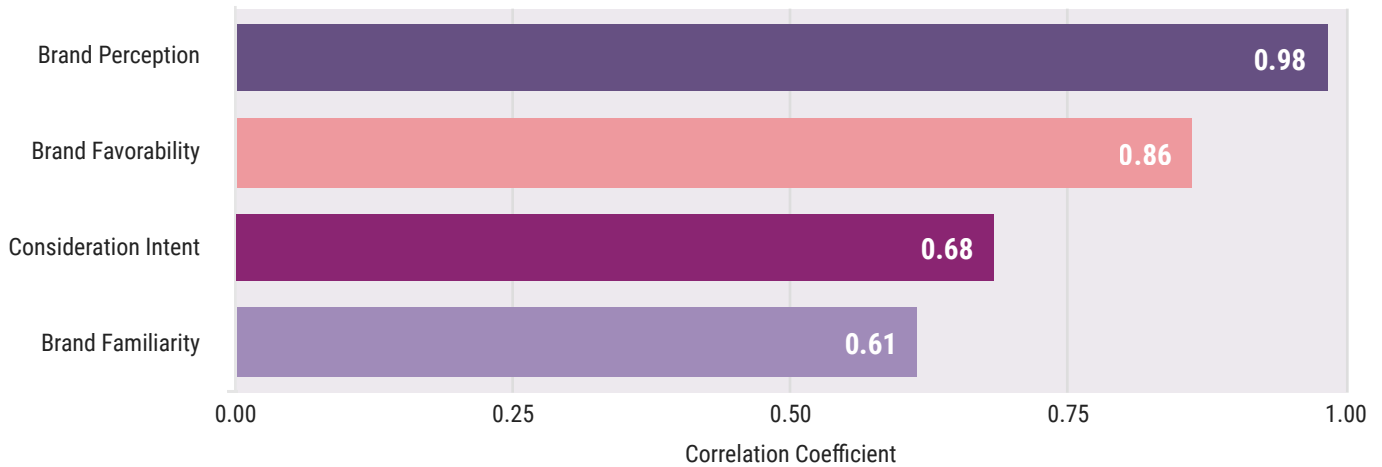
FINANCIAL SERVICES

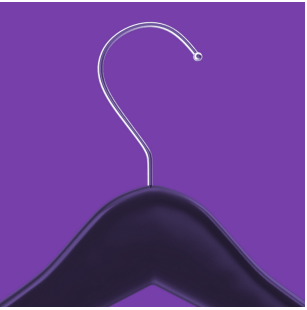
Working with an financial services company, attention metrics strongly correlated to an upward trend in brand lift for perception (.98 correlation coefficient) and brand favorability (.86 correlation coefficient), as measured by a third-party brand lift study.

Attention vs. Favorability & Consideration



Correlation Coefficients of Attention to Brand Lift





Retail & Fashion

Across the retail, fashion, and beauty space, attention optimizations drove positive brand outcomes across the funnel. Our meta-analysis revealed brand awareness and consideration uplifts ranging from +21–30% across campaigns optimized to attention *vs.* viewability, and up to 4X higher brand recall. These studies also found strong correlations between attentive media and conversions, with high attention media driving up to 89% higher conversions than low attention media.

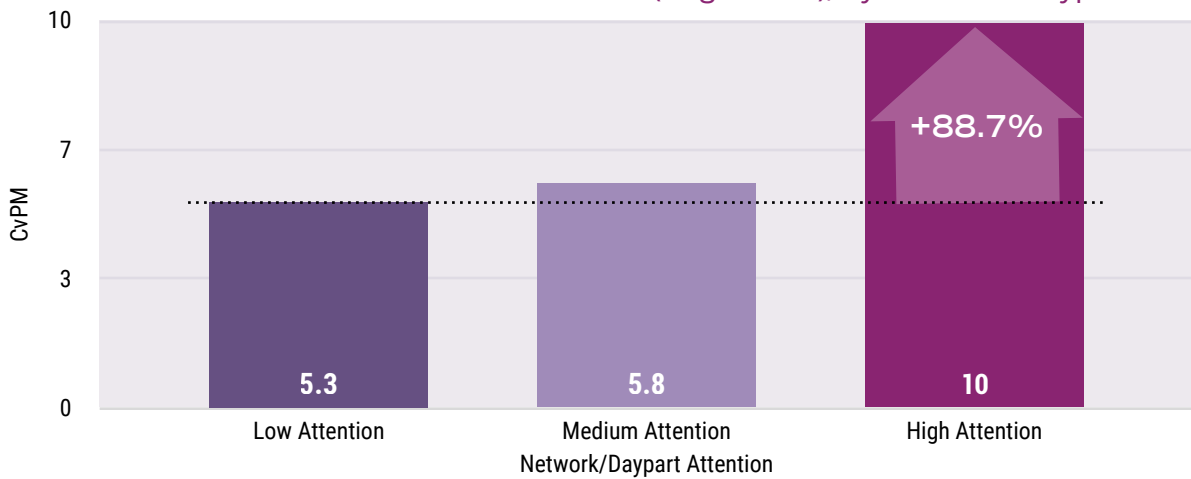
Working with a large supermarket chain, this study evaluated the relationship between brand lift and predictive attention per impression. In an A/B test, attention optimizations drove a 27% increase in brand awareness and 21% increase in brand consideration compared to the control group optimized to viewability within a premium marketplace. In terms of advertising spend, CPMs increased because the client was able to identify higher quality media placements worth their investment, and upon further testing, ROI rose significantly as well.

Working with a global fashion brand to measure brand lift outcomes, a series of A/B tests were conducted across ad formats, publishers, and optimization tactics. It was found that brand recall among viewers exposed to attention-optimized placements was 4X higher than among those exposed to viewability-optimized media.

For a beauty brand with upper funnel outcomes, this study revealed that brand recall was about 3.5X higher among respondents exposed to attention-optimized campaigns than the viewability-optimized group.

A lifestyle brand sought to improve conversions and increase sign-ups through their TV advertising campaigns. This study evaluated the brand's media performance across all networks and dayparts and ranked the results by low, medium, and high attention. We then compared these rankings to conversions measured through the brand's integration with Data Plus Math. The networks and dayparts that most successfully captured—and held—viewer attention, drove 89% higher conversions compared to low attention media.

Attention vs. Attribution Performance (Avg. CvPM), by Network/Daypart



For a global fashion brand with lower funnel brand outcomes, this study compared attention-optimized campaigns to viewability-optimized campaigns, and found a very strong correlation between attentive media and clicks and conversions.

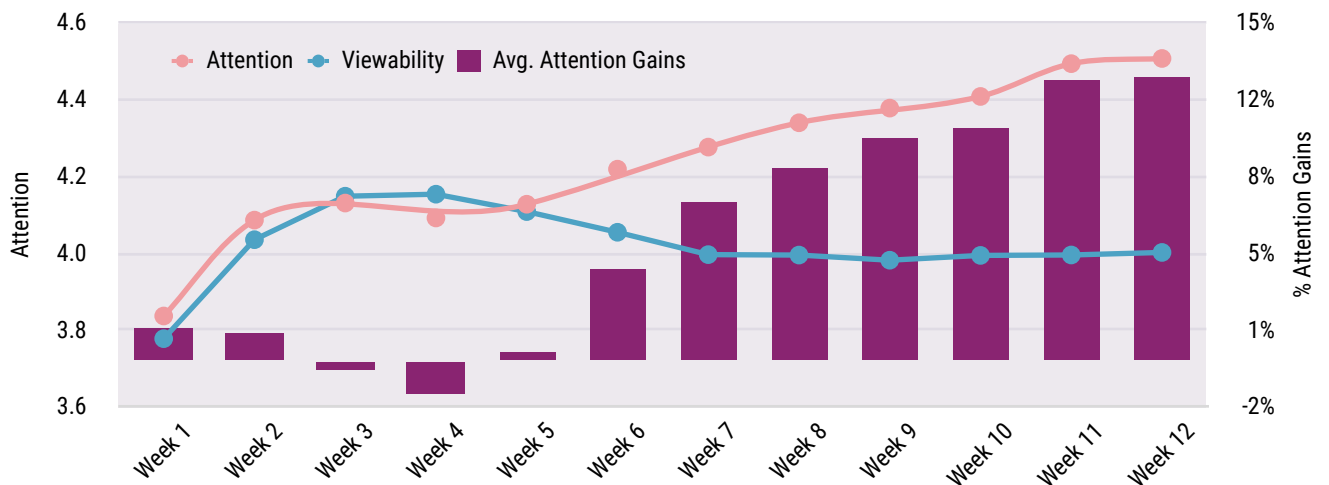


Media & Tech

For Media & Technology brands, attention outperformed viewability across upper funnel outcomes on Desktop and Mobile, and drove increased conversion rates for broadcast advertisers. Looking at upper funnel metrics, individuals exposed to attention-optimized media tracked increased familiarity levels and unique reach, compared to viewability. Attention optimizations also proved up to 31% more cost-efficient. Across lower funnel outcomes, high attention media drove ~2.5X more subscription sign-ups and ~16.4X more site engagements than low attention media. And for TV advertisers, attention was found to significantly impact conversions.

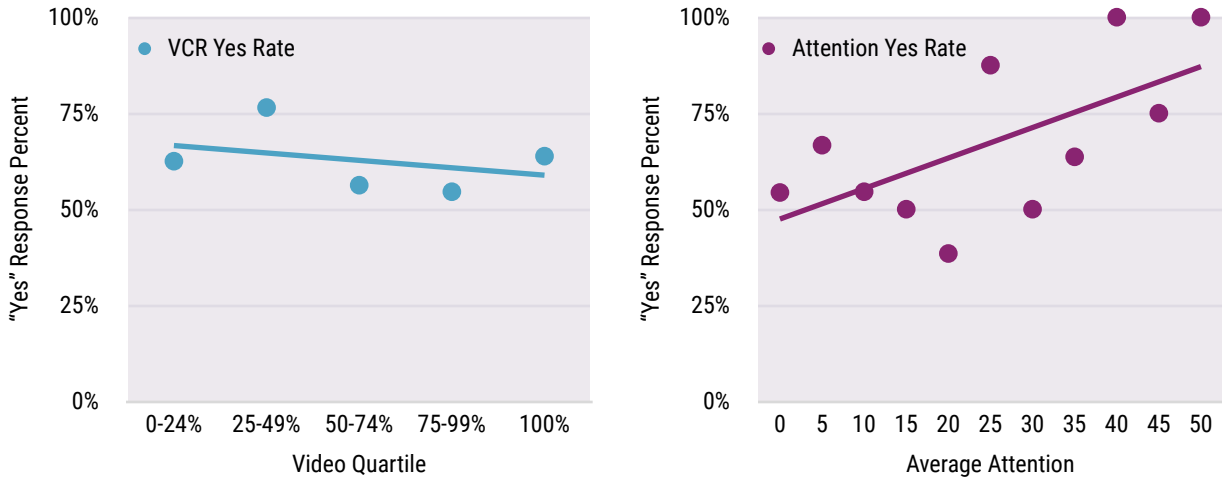
A leader in the tech space wanted to compare attention and viewability as optimization techniques to drive brand lift. In an A/B test, the attention-optimized group tracked 6% higher familiarity levels and 20% higher unique reach than the group exposed to viewability-optimized media. Attention optimizations also led to 12.8% higher average attention and proved 31% more cost-efficient.

Attention Optimization vs. Viewability Optimization



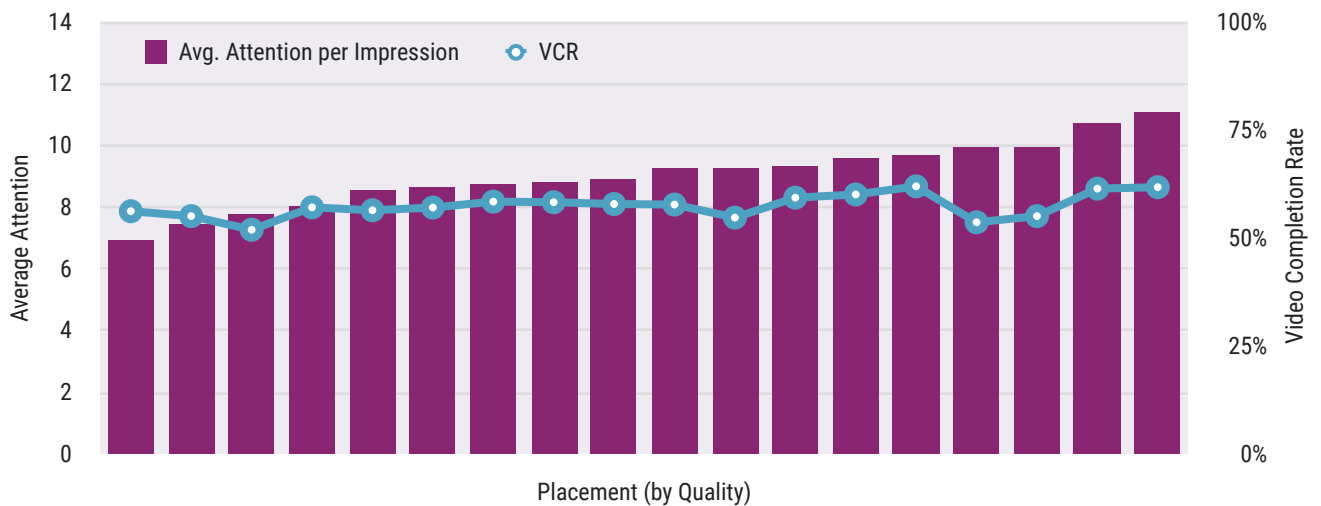
For another technology client, this study compared the effects of attention and Video Completion Rate (VCR) on brand impact. Results showed that attention correlates closely with increased brand consideration, while VCR does not. In other words, when compared to the same survey data, increased VCR is not indicative of a higher likelihood of brand consideration, while increased attention is.

Brand Lift vs. Video Completion Rate and Attention



Furthermore, VCR varied only about 10% across placements, whereas attention metrics varied about 60%, equipping the client with significantly more data to act on.

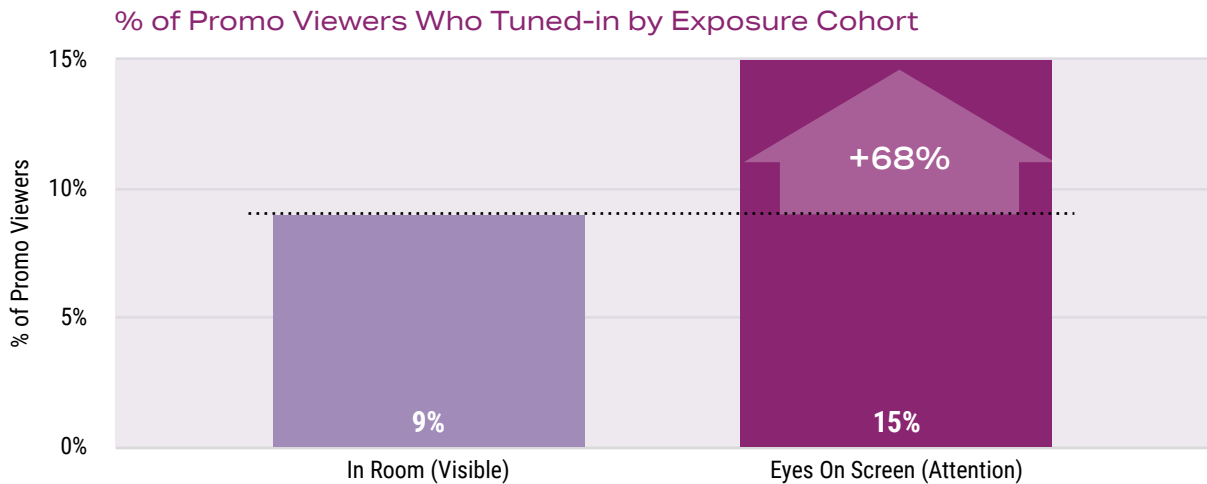
Video Completion Rate vs. Average AU



With a broadcast TV network, it was found that the number of attentive seconds spent with an advertisement can impact conversions. For this study, we tracked viewer attention to TV ads using eye-tracking technology.

Participants were bucketed into three groups: those who were attentive, those who were not attentive, and those who were not exposed to the ads.

By matching these viewer segments to tune-in data, the study determined that viewers who actively paid attention to the promo ads were 68% more likely to watch the program.



Notably, level of attention was also important—viewers who were attentive to less than three seconds of the ad were not likely to convert and watch the program; however those who were attentive for more than three seconds not only tuned in at a significantly higher rate (68%), but also watched 46% more programming.

For a global streaming service looking to drive site engagement, an experimental study was conducted across Mobile and Desktop. It was found that high-attention placements generated 16.37X more site engagements and 2.49X more subscription sign-ups than low attention placements.



Healthcare

For several healthcare brands, attention-optimized media drove greater impact on brand familiarity, brand perception, site visits, and cost-per-call across Desktop, Mobile, and TV. Results from these studies, and others within this vertical, prove the value of optimizing to attention over viewability for advertisers looking to drive full-funnel outcomes.

A study for a healthcare company with upper funnel brand outcomes used A/B testing to compare the impact of attention and viewability optimizations on brand lift. A third-party attitudinal awareness study revealed that attention-optimized placements yielded 85% greater impact on brand familiarity and 77% greater impact on brand perception than viewability-optimized placements.

Brand Metric	Attention Optimized	Viewability Optimized	Impact
Awareness: Brand Affinity	5.74%	5.00%	+15%
Familiarity: Helps Manage Care	8.44%	3.36%	+150%
Familiarity: Helps Manage Health	9.10%	7.62%	+20%
Perception: Is Easy to Use	7.70%	6.64%	+15%
Perception: Is Easy to Work With	9.59%	3.20%	+200%
Perception: Offers Peace of Mind	10.16%	8.20%	+25%
Perception: Is Caring	7.38%	4.34%	+70%

Third party Brand Study Partner: Absolute Percent Lift

■ A UK pharmaceutical company with lower funnel brand outcomes wanted to uncover the impact of attention vs. viewability on conversions, specifically for mobile ad placements. This direct-to-consumer study analyzed two groups of viewers: one attention-optimized group and one viewability-optimized group. For the former, post-exposure conversions more than doubled. Display advertising predicted to have 60%+ chance of being seen drove 117% more site visits than ads that were predicted to have only a 20% chance of being seen.

■ A direct-response advertiser aimed to lower customer acquisition costs by efficiently generating inbound calls to drive sales. The client was able to provide cost-per-call performance data for each TV spot, allowing us to compare cost-per-call for each spot to viewer attention metrics. The results showed that spots that captured high attention drove a 14% lower cost-per-call than those that captured low attention. In fact, viewer attention was a bigger factor in the advertiser's cost-per-call than the spot price.



Energy

In the Energy space, attention-optimizations drove +10-12X lift in ROI by increasing post-click and post-view conversions by 98-206%, revealing the strong correlation between high attention media and lower funnel outcomes.

■ An observational study for a gas company with lower funnel brand outcomes, compared historical impression-level data to clicks and conversions data with the goal of uncovering whether high attention domains and ad formats correlated with increased clicks/conversions. The study revealed a 100% increase in post-click conversions and a 200% increase in post-view conversions among high attention domains and formats, as well as the potential to increase ROI through attention optimizations.

■ For an energy company, an experimental study found that attention-optimized campaigns drove a 98% increase in post-click conversions and a 206% increase in post-view conversions. The client also saw +10-12X lift in ROI.

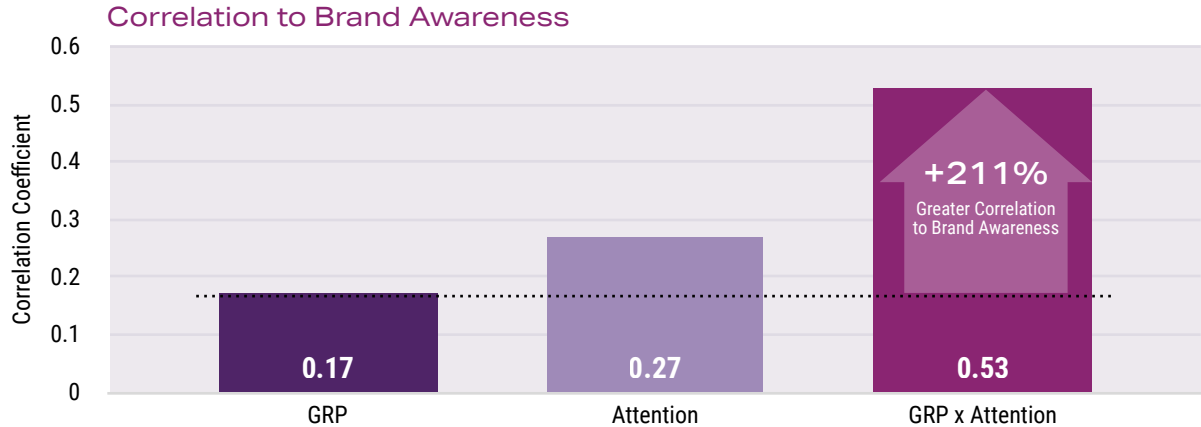


QSR

From store-visits to brand awareness, attention-optimized media outperformed GRP-optimized media for several QSR advertisers.

A QSR client with lower funnel brand outcomes wanted to confirm a link between attentive seconds spent with an advertisement and increased store visits, or conversions. This study found that when a viewer paid attention to more than three seconds of the ad, they were 68% more likely to convert.

A Marketing Mix Model (MMM) analysis for a restaurant revealed that optimizing to GRPs alone is insufficient. The study found that TV attention is highly correlated with brand awareness—attention optimized media was 59% more correlated than GRP-optimized media. And optimizing to both GRPs and attention resulted in 211% greater correlation to brand awareness.



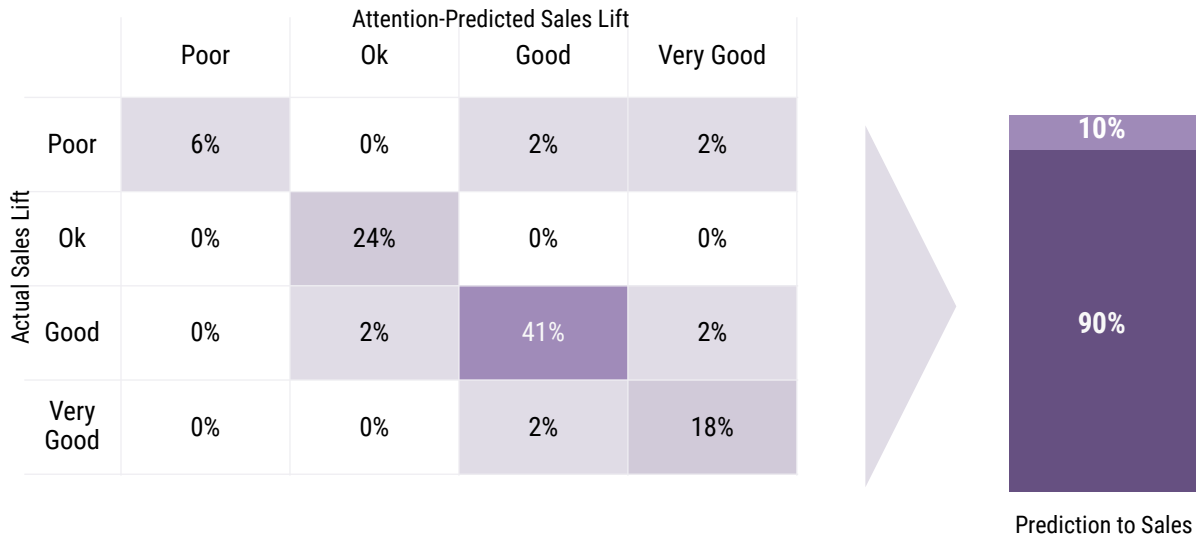


CPG

In the CPG space, research findings revealed that attention metrics were up to 90% predictive of sales lift outcomes and over 180% more correlated with Nielsen ROI compared to viewability metrics.

This study for a global CPG brand explored the impact of creative attention on lower funnel brand outcomes. Analyzing over 50 individual TV creatives, we considered a number of factors—time, attention seconds, proportion of attention, and frequency—to determine how successfully each creative captured viewer attention. It’s worth noting that both ad placement and creative played a role in how attentive viewers were to the ads.

Each ad was categorized into four performance-based categories. Those that fell in the “very good” or “good” attention categories within the first two weeks of the campaign were predictive of sales lift over the next three months.

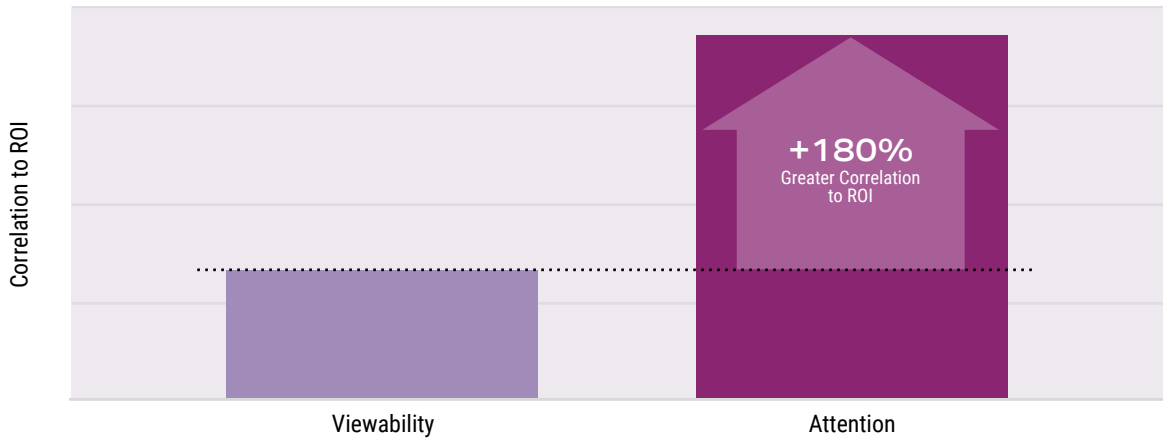


Overall, the study’s creative attention scores were 90% predictive of sales lift outcomes, helping to prove that high attention ads drive greater ROI.

CONSUMER PACKAGED GOODS

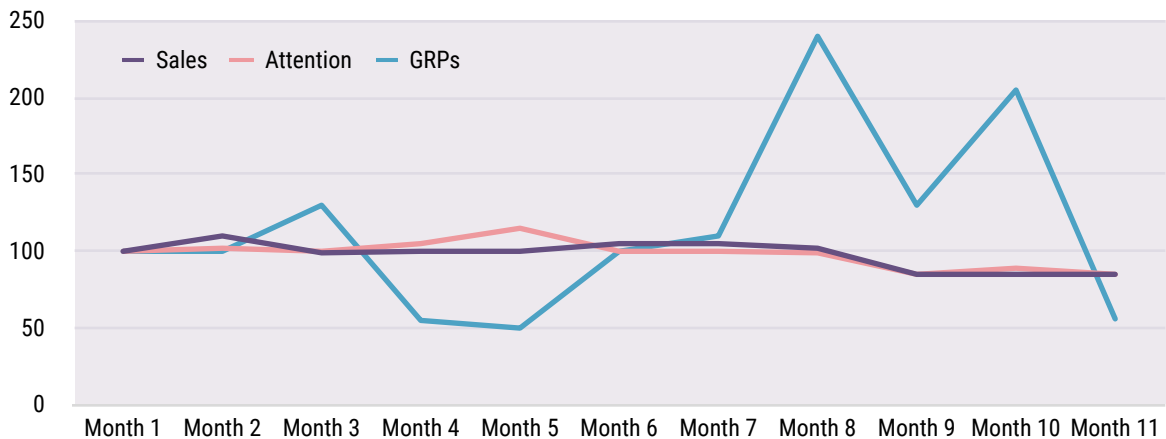
Another CPG client with upper funnel brand outcomes sought to determine which digital ad placements were delivering the most quality per dollar. Based on product sales data, attention metrics proved to be over 180% more correlated with Nielsen ROI compared to viewability.

Viewability vs. Attention Correlation to ROI



A CPG client wanted to understand the link between TV ad attention and actual sales, so using a third-party attribution partner this study compared ad attention data to campaign sales. It was found that attention metrics were more than 75% correlated with sales, and a predictable indicator of campaign impact. In comparison, GRPs showed almost no correlation with sales.

Indexed Performance Metrics by Month (:15 Creative)



A GROWING BODY OF EVIDENCE BY OUTCOMES

More Active Attention Seconds Can Increase Brand Uplift/STAS

CATEGORIES

This series of studies includes data across six countries and 20 Tier 1 IAB categories: Technology & Computing, Food & Drink, Automotive, Style & Fashion, Video Gaming, Shopping, Personal Finance, Travel, Pets, Home & Garden, and Internet/Telecommunications.

CHALLENGE

The industry wanted to understand whether attention metrics could be linked to a short-term metric like sales uplift, and whether attention seconds were predictive of this impact.

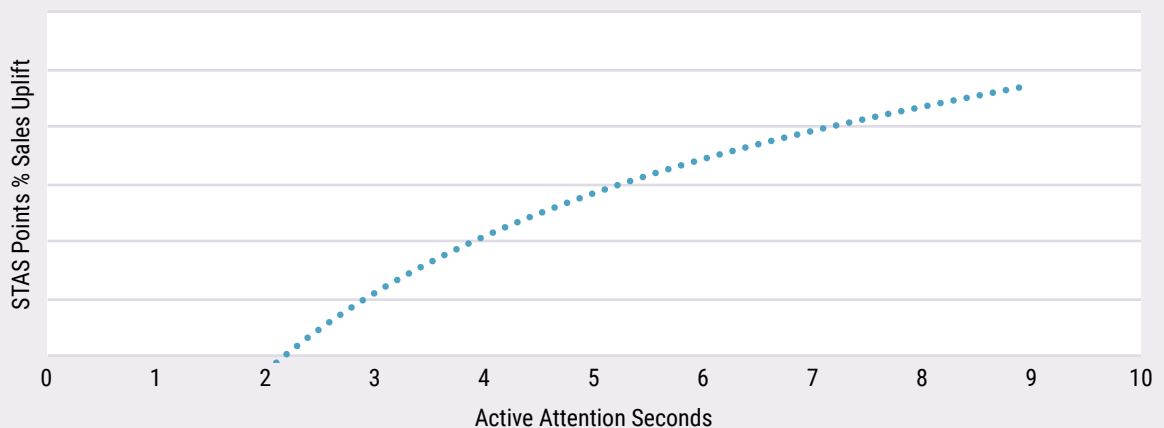
HOW IT WORKED:

We collected attention via gaze tracking on TV, Mobile, PC and Tablet to determine whether respondents were looking directly at the ad while viewing media in real time (across six platforms). After their viewing session, respondents completed a discrete choice survey indexed against a baseline to determine uplift.

RESULTS

Findings revealed that Active Attention (eyes on ad) and brand uplift are related ($r = .83, p = < .000$), meaning more active attention seconds equals more brand uplift. The regression also showed that zero attention seconds drives no brand uplift. On average, the highest active attention platform drove **4X greater uplift** than the lowest active attention platform.

Active Attention Seconds to STAS/Sales Uplift



High Attention Platforms Positively Impact Memory Retention

CATEGORIES

This series of studies includes data across two countries and 20 Tier 1 IAB categories including: Technology & Computing, Food & Drink, Personal Finance, Automotive, Style & Fashion, Shopping, Travel, Pets, and Home & Garden.

CHALLENGE

Advertisers who recognize the value of long-term metrics for brand growth sought to understand whether the relationship between attention and outcomes extended to memory retention.

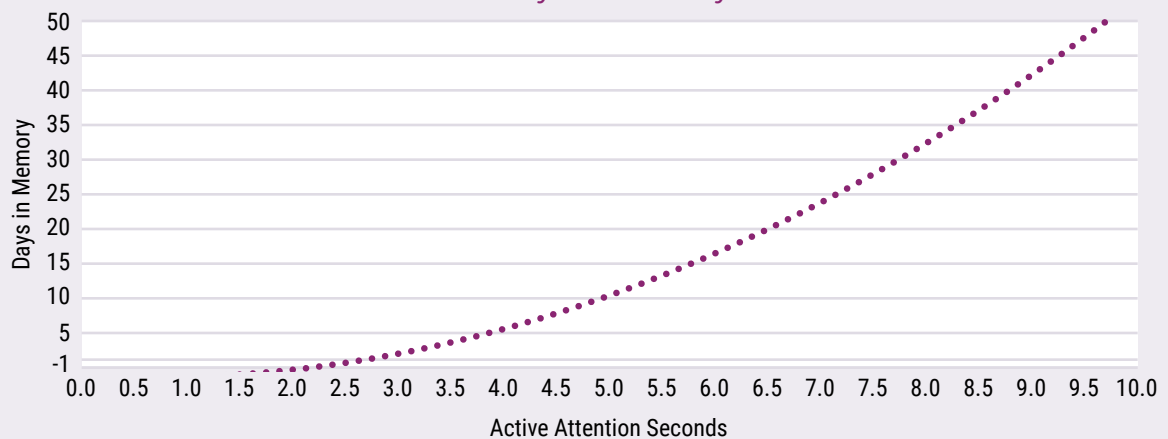
HOW IT WORKED:

We collected real-time viewer attention across five platforms via gaze tracking on TV, Mobile, PC, and Tablet. Respondents then completed a discrete choice survey indexed against a baseline to determine uplift. Then, to determine advertising decay, the same individuals completed additional choice surveys after 14 and 28 days.

RESULTS:

Findings showed that memory and number of active attention seconds were related ($r = .76$, $p < .05$). On high attention platforms, it takes up to 5X longer for memory to decay to zero compared to low attention platforms. Memory kicks in around the **3 second mark**, so while under 2 seconds may generate some short-term impact depending on platform, +2 seconds slows ad decay.

Active Attention Seconds to Days in Memory



HIGH ATTENTION PLATFORMS POSITIVELY IMPACT MEMORY RETENTION

But don't mistake this as a reason to create longer ads—although passive attention and ad length are related, active attention and ad length are not. This means longer ads don't, by default, bestow more attention, they just create more wastage.

While not all consumers are ready to make a purchase when an ad reaches them, ads that are remembered for longer could still nudge a purchase long after someone has seen it. And quality media that delivers high levels of active attention enables good creative to be remembered for longer.

A Strong Relationship Between Active Attention and Mental Availability

CATEGORIES

This US study includes two categories: Food & Drink and Home & Garden.

CHALLENGE

Mental availability is a “true north” measure of brand strength. Its causal relationship with market share makes it a leading indicator of market share change. The brands included in this study consider mental availability a market-based asset, so they wanted to understand whether attention could be directly linked to this measure.

HOW IT WORKED

We determined real-time viewer attention across three platforms via gaze tracking on Mobile. After their viewing session, respondents completed a mental availability survey to determine uplift. Mental Availability goes beyond basic memory retention and measures associations to a range of category cues which form a mental availability score.

RESULTS

Findings showed a strong positive relationship between Active Attention Seconds and Mental Availability Uplift ($r = .77, p < .05$). In other words, when active attention is paid, mental availability uplift is notably positive, and when no attention is paid, mental availability uplift is notably negative (or shows no sizable change). Thus, increased attention gives brands some chance of market share growth, while decreased attention will likely impart brand decline.

Attention and Creative

CATEGORIES

This study collected data on 12 ads across five Tier 1 IAB categories: Food & Drink, Automotive, Style & Fashion, Pets, and Home & Garden.

CHALLENGE

Brands sought to answer the frequently asked question, “What impacts attention more, media or creative?”

HOW IT WORKED

We measured real-time viewer attention across five platforms via gaze tracking technology on TV and Mobile. After their viewing session, respondents completed a discrete choice survey which was indexed against a baseline to determine uplift.

RESULTS

This study showed that the same creative performs better or worse—as defined by brand uplift—in line with platform attention performance.

Active Attention Seconds	Platform A	Platform B	Platform C	Platform D	Average Attention Seconds
Ad A	5.0	4.1	2.3	13.0	3.4
Ad B	2.0	2.2	2.6	9.1	2.6
Ad C	1.6	1.8	1.9	8.4	2.5
Ad D	2.0	2.1	2.3	7.9	2.1
Ad E	1.9	3.1	2.7	7.9	2.0
Ad F	3.2	2.6	2.8	7.8	1.8
Ad G	1.7	1.7	3.4	6.4	1.6
Ad H	2.1	2.7	2.8	6.4	1.5
Ad I	1.4	2.6	3.4	6.3	1.4
Ad J	3.4	2.1	2.5	6.0	1.2
Ad K	2.0	2.1	3.3	6.4	1.5
Ad L	1.9	2.9	2.4	5.3	1.1
Average	2.4	2.5	2.7	7.6	1.9

STAS Performance: Worst \longrightarrow to \longrightarrow Best

ATTENTION AND CREATIVE

This means that attention and brand uplift/STAS are related, but more importantly, that even good creative is impacted by platform performance. In fact, good creative (defined by the average attention seconds it generates) suffers the most —meaning the drop in attention when played on poorer quality platforms is greater than the seconds lost between best and worst platforms for average creative.

In sum, these findings reveal the impact of placement over ad creative and the importance of attention in marketing. If creative was the dominant driver of attention, it would perform equally across platforms, but it does not. Put another way, brilliant creative is only effective if it garners attention, and this attention is mediated by the platform rather than the creative itself.

PROVING IT FOR YOURSELF: MEDIA METRICS

If you're ready to take the next step and prove the connection between attention metrics and the outcomes that drive your business, this next section will help you get started.

Typically the first step in proving the correlation to outcomes is to identify the KPI or business outcome that is most important. These are known as dependent variables.

1. Pick Dependent Variables

AWARENESS, CONSIDERATION, SALIENCE

Attitudinal and familiarity based impact metrics are typically measured by asking respondents questions about brand recall, consideration, likeability, and associations to category cues. Survey design is extremely important to avoid the introductions of biases.

ENGAGEMENT DATA

It's possible to link advertising exposure to subsequent online activity, like search, leads, and on-site engagement. To measure search behavior, it's necessary to use a panel with access to browser data, and measuring leads or engagement data requires cookies to link to ad exposures. Both of these requirements can increase complexity.

SALES DATA

Linking advertising performance to sales data is the holy grail of outcomes for many marketers. Offline sales are typically matched to exposures using loyalty card data and identity onboarding solutions. Online sales can be harder to match to ad exposure given the data policies of most online retailers, but it's possible on large retail media platforms by using their attribution systems, or more holistically, by using panels running browser software.

2. Decide on Methodology

After selecting the dependent variable, a test is set up to compare media optimized to attention metrics to a control group and a second treatment of existing optimization methods. This can take the shape of an A/B test or correlation analysis.

The changing consumer privacy landscape is introducing challenges to connecting ad exposure to outcome at scale. While this makes it even more important to use metrics that are correlated with outcomes, advertisers should take care to ensure the outcome measurement tools they use aren't impacted by loss of identity signals.

A/B TESTING (USER RANDOMIZED CONTROL TRIAL)

Randomized control trials (RCT) are the gold standard of research. In an RCT trial, used to prove the connection between attention metrics and outcomes, users are randomly placed into three groups: control, treatment - Attention, and treatment - Viewability. The viewability group is necessary because marketers are usually looking to test attention metrics vs. the current tool they deploy. If metrics like AVOC / Video Completion Rate are used, they can be swapped for viewability.

In research conducted on live campaigns, the study uses cookies or IDs to attach users to treatment groups. The media then served to these groups is either suppressed (control), optimized towards attention metrics (treatment- Attention), or optimized towards viewability (treatment - Viewability).

The results of the A/B test will compare the cost of incremental outcomes on each treatment group to the control group, establishing which treatment is more correlated with outcomes, and which will provide a more efficient impact.

A/B TESTING (MEDIA SPLIT)

This methodology splits media placements into two groups and optimizes one towards attention metrics and the other to viewability. A group of users is held back as a control.

This type of A/B media split test is much easier to execute than RCT, but several processes need to be put in place to suppress or account for users who are exposed across both placements. It's possible to control for pollution across cells using audience suppression during the campaign or by filtering users based on exposures post-campaign.

The results of the A/B test will compare the cost of incremental outcomes on each treatment group to the control group, establishing which treatment is more correlated with outcomes, and which will provide a more efficient impact.

CORRELATION ANALYSIS (OBSERVATIONAL)

A correlation analysis is the easiest test to assess the correlation between attention metrics and outcomes. Marketers will typically test attention metrics vs. viewability, video completion rate, or other media metrics. Given the binary nature of most metrics, it's necessary to aggregate the media into placements whose correlation to metrics are tested.

You can create bins or buckets of exposures based on partner placement groupings and then test the correlation of the ratings for each of those groupings to the dependent variable.

The results of this test will show the correlation between attention metrics and viewability or other media metrics.

Recommended Process:

Stage	Why?	How?
What is the KPI or Outcome that we are attempting to prove correlation with?	Inform design of study	Identify metrics that are important to marketing organization.
What measurement methodology will be leveraged?	Inform design of study	Dependent on budget, appetite for complexity, and desire for rigor.
Do attention metrics predict or correlate with outcomes?	Primary Evaluation KPI, prove attention metrics are predictive of or correlated with outcomes.	Measure cost of incremental outcomes when optimizing toward attention metrics vs. viewability when A/B testing. Measure correlation of attention metrics vs. viewability when doing a correlation test.

POSITIVE LONG-TERM IMPACT

As the link between attention metrics and outcomes becomes better recognized, we will see a transformational shift in the digital media ecosystem that extends beyond improving advertising effectiveness to repairing the broken incentives that are slowing growth.

Once the true quality of media is realized by buyers and sellers alike—through metrics proven to correlate with brand outcomes—advertisers will be able to justify investment in higher quality placements, incentivizing publishers to create more of these high-quality ad formats. This establishes a positive feedback loop between buyers and sellers, fueling the growth of the digital media market and improving media quality across the board.

For advertisers, attention metrics also offer transparency and a privacy-safe solution to effectively measure media quality and performance. While hygienic metrics, like viewability, might be able to answer the question, “Should we pay for this media?” attention metrics answer more important questions like, “How much should we pay for this media?” “How hard is my media working?” and “Did my brand message create attention?” Equipped with answers to these questions, marketers can invest more confidently, optimize media towards more efficient sources of attention, and deliver more effective brand outcomes.

Thank you to our contributors:

- Michael Follett
Lumen
- Marc Guldemann
Adelaide
- Karen Nelson-Field, PhD
Amplified Intelligence
- Yan Liu
TVision
- Ezra Pierce
Avocet