



INFILLION

Eyes Wide Shut

Traversing the Attention Spectrum

If an ad is served, but no one
noticed, did it really happen?

Eyes Wide Shut:

Traversing the Attention Spectrum

How many browser tabs do you have open right now? Are the labels still viewable, or have they shrunk into mere colored icons, clinging for dear life to their precious scraps of real estate? Legend has it that Chrome can support over 6,000 browser tabs.¹

Worldwide research on attention concludes that the more multitasking we do, the less productive we are.^{2,3} In fact, the better you think you are at multitasking, the worse you will perform against your more modest counterparts.⁴ But most of us intuitively understand that we're less effective on the days when we're constantly context-switching, and we struggle valiantly to create pockets of focus time. Which begs the question: How did our attention become so fragmented?

While the digital era has supercharged overall human productivity, we've paid a nontrivial price as individuals: Our attention is approaching maximum capacity as we sift through endless decisions, ever-growing to-do lists, and constant distractions day after day.

And within that sea of distractions, ads are the tenacious, resourceful pirate ships fighting stubbornly to hijack their cut of attention. They scheme relentlessly to surprise us, lure us, and trick us by masquerading as native content. Yet with the average person bombarded by at least hundreds (and maybe thousands) of ads daily, even the most advanced "piracy" has its limits. Advertisers simply cannot expect audiences to constantly pay attention. As a byproduct of acclimating to the online world, we have become increasingly savvy about reclaiming our time. When asked, 90% of consumers told us they have strategies for dodging digital ads and more than half asserted they "always" avoid ads. For most, commercials are simply a cue to check their phone, grab a snack, or take a break.

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EXECUTIVE SUMMARY

Without first capturing attention, advertisers cannot benefit from meaningful downstream activity such as increased consideration, purchase intent, or sales.

However, not all attention is created equal. Marketers should strive to deliver premium experiential attention to clients, rather than interruptive attention. This earned and highly engaged attention triggers deeper-level thinking that allows our attitudes, preferences, and decision-making frameworks to become more malleable and receptive to new information. While some ad or placement features can improve the likelihood of viewer attentiveness, these signals are indirect compared to the actual behavioral outcomes generated by experiential attention, such as engagement with an ad.

To capture experiential attention, marketers must do 3 things:

- ✓ **Let audiences opt-in.** Highly disruptive ad formats like pop-ups, interstitials, and auto-playing video ads coerce audiences into viewing, leading to lower-quality attention.
- ✓ **Facilitate a value exchange.** Barter with your viewers, such that they choose to “pay” attention. This value exchange can take many forms: fewer ads, shorter ads, virtual game currency, lowered paywalls, promo codes, and more.
- ✓ **Provide ample interactivity.** Build ads that invite high engagement by offering opportunities to explore the unit or personalize the ad experience: leverage games, quizzes, hotspots, carousels, and multiple video options.



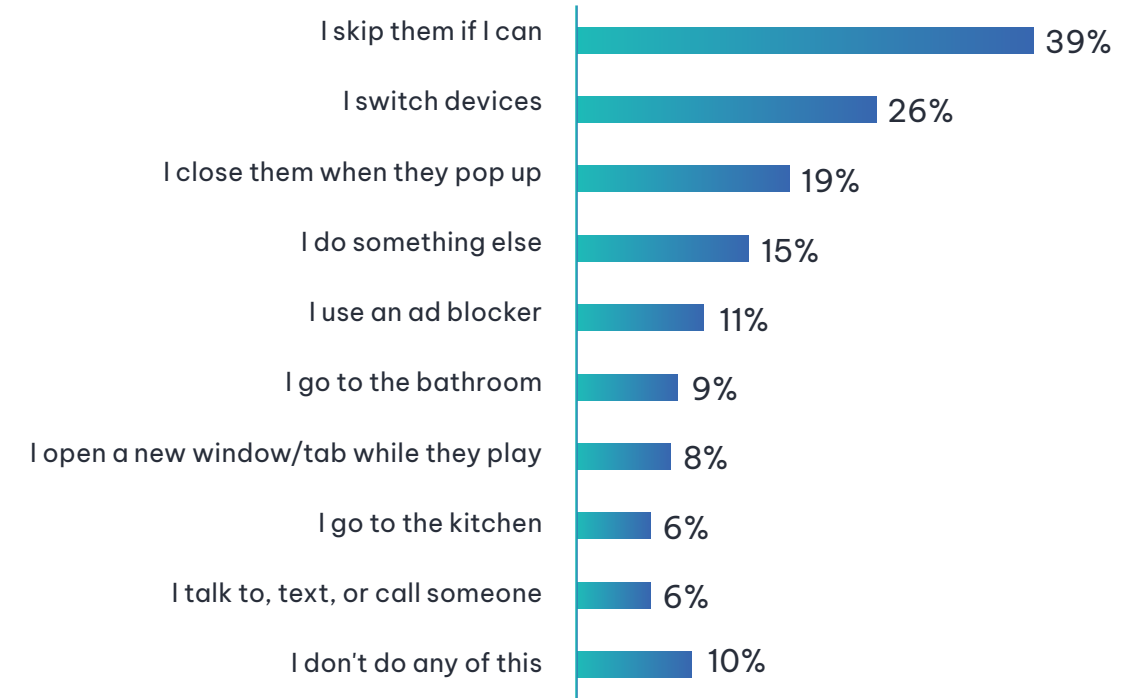
Not surprisingly, nearly half of consumers also perceive ads as “annoying,” implying that advertising is inherently bothersome, disruptive, interruptive, irritating, and distracting. Consumers are also likely to feel overexposed, agreeing that ads are frequently repetitive and irrelevant. Restricting frequency and improving targeting are achievable tactics for advertisers, but mitigating annoyance and avoidance is more challenging.

90% of consumers told us they have strategies for dodging digital ads

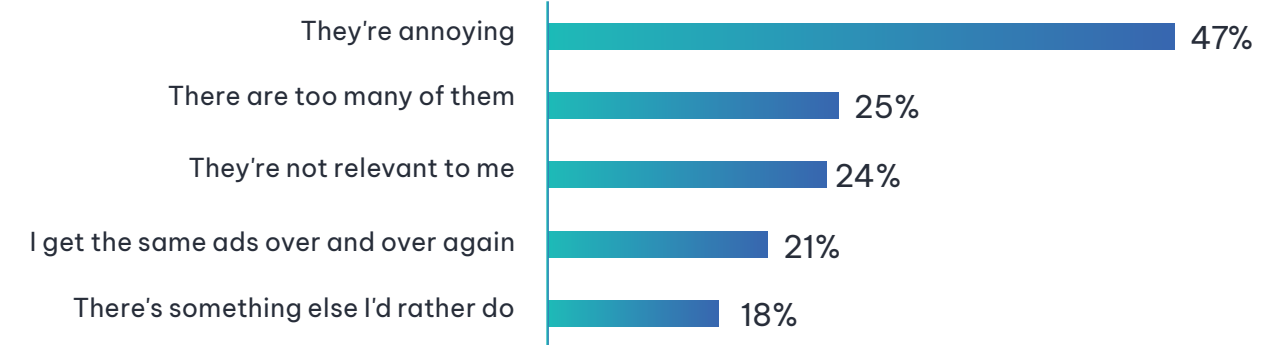
So where does that leave advertisers and their intrepid efforts to win consumer attention?

The “Attention Economy” movement posits that never before have consumer time and focus been more valuable relative to their scarcity. To tackle the challenge of accessing consumer attention, brands and agencies must consider two central questions: how they’re evaluating ad performance, and what value they’re delivering to consumers in exchange for attention.

When using your phone, laptop, or TV, how do you typically avoid ads?



Why do you avoid ads?



Ad Avoidance Survey Methodology

In April 2024, Infillion’s Research team surveyed U.S. consumers across its digital network about their ad avoidance behaviors, as well as their general attitudes towards ads. The survey collected 983 responses across a variety of streaming, student, and gaming sites.

The background features a complex digital environment with several screens. One prominent screen in the center-left shows a line graph with a blue line fluctuating over time, with the word 'ANALYSIS' visible at the top. Other screens display various data visualizations, including bar charts and abstract patterns. The overall color palette is dominated by deep blues and purples, with some warm orange and yellow highlights from the data points and interface elements.

The Evolution of Attention Measurement

The Evolution of Attention Measurement

Before we dive into how to better capture viewer attention, we need to address the state of attention measurement.

When evaluating the quality of an ad, advertisers ask:

1. Was the ad delivered where intended?
2. Was the ad viewable?

These questions represent two forms of ad measurement that are active on every single digital ad campaign today: deliverability and viewability. Taken together, these measures tell us if an instance of an ad even qualifies as an impression.

And yes, deliverability and viewability are obvious prerequisites for attention. An ad must be delivered and viewable for an audience to see it. However, there is a stark difference between viewable and viewed.

Attention is not paid just because something is calling for it.

Smartphone notifications are a hallmark example of this tension. People receive a steady stream of notifications throughout their day, but the constant influx can lead to notification fatigue. Alerts begin to pile up, losing relevance. And many ultimately go ignored, or altogether unnoticed. This pseudo-paradox transcends the visual modality: we commonly talk about “selective hearing,” “falling on deaf ears,” or “in one ear and out the other.” Attention is not paid just because something is calling for it.

Subsequently, viewability standards ultimately left advertisers wanting more. Under the IAB’s current viewability standards, ads that are marked as “viewed” (and as such, count towards impression delivery) may not have a fighting chance when it comes to actually capturing the attention of those on the other side of the screen. Today, we finally have the technology to measure attention...but does it still fall short of advertisers’ needs?



There is a stark difference between **viewable** and **viewed**.

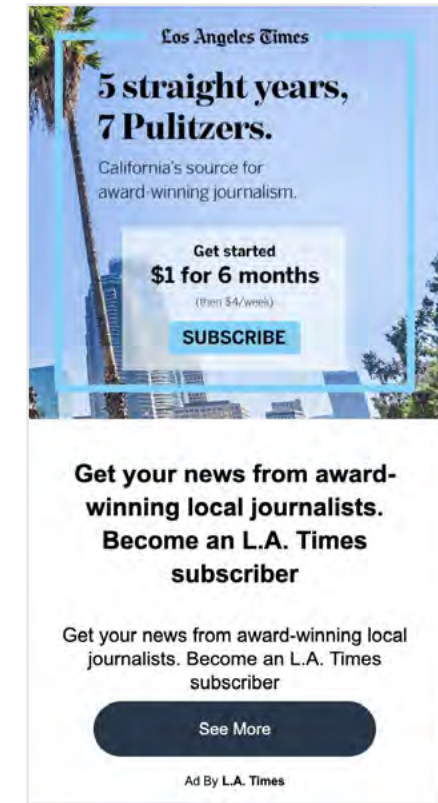
IAB VIEWABILITY STANDARDS

Standard ad formats	50%	visible for 1s
Large ads	30%	visible for 1s
In-stream video ads	50%	of pixels visible for continuous 2s



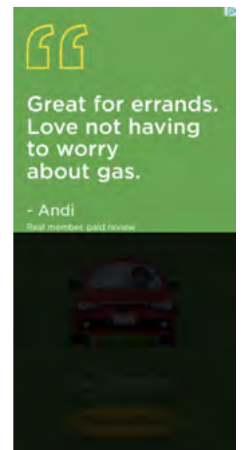
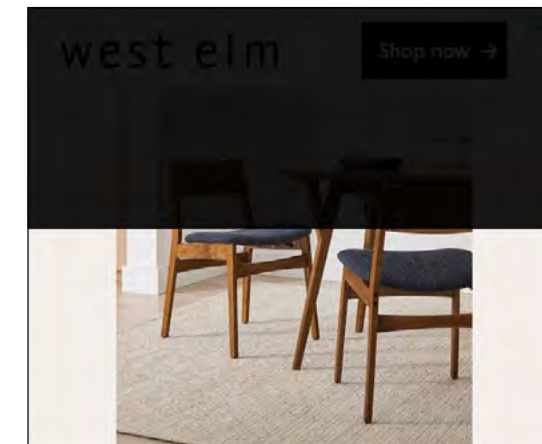
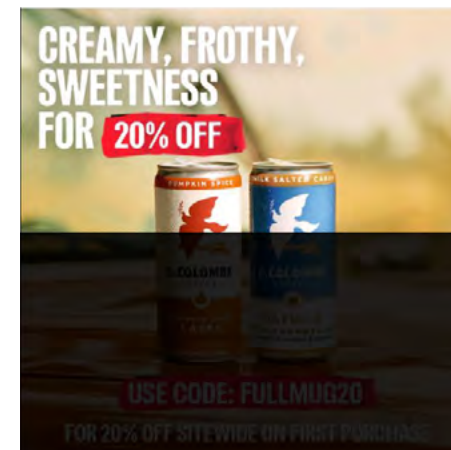
Just how fast is 1 second?

In 1 second, the average person can read 3-4 words. What message would you glean from the first 4 words of these ads?



Can you guess these products?

All of the ads below qualify as “viewable” per IAB’s current standards.



Attention Measurement Today

Measuring real human attention is challenging, because the act of paying attention is an entirely cognitive process. The markers of attention live in our moment-to-moment mentalizations. And even when we are seemingly not paying attention, we may find ourselves deeply attentive to our own thoughts or memories. Because attention exists inwardly, cognitive psychologists who study attention often rely on behavioral measures that are highly correlated with attention; the gold standard is eye-tracking.

Attention measurement in the ad industry adopts an analogous approach. Rather than measuring actual human attention at scale, it is tuned towards **ad features** or features of the **ad environment** in order **to predict the likelihood of capturing attention**.

Certain circumstances are known to be more auspicious for attracting attention, because they provide more **opportunity** for discovery:

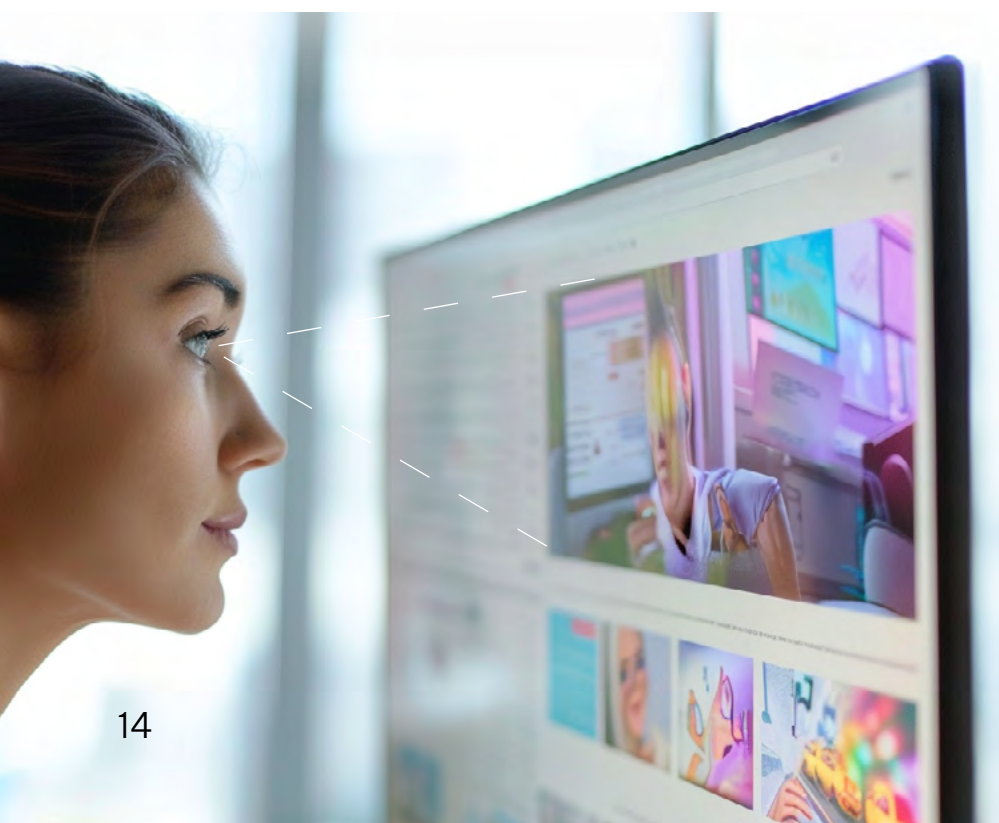
- Positioning within the viewer's eye line
- Ability to scroll the full ad into view
- Fewer ads on screen
- Less clutter
- Greater coverage on the page or share of screen

Knowing that these are all different aspects of the ad or its environment that impact attention and attention quality, we can use them as inputs in probabilistic inference models to predict the likelihood that an ad harvested real attention from our audience. Outputs of these models are typically a numerical value and reflect the complex relationships between the various inputs and their combined predictive power. Across today's existing attention measurement models, attention scores correspond to predicted attention levels, with higher scores predicting more attention or higher-quality attention. Notably, these models output an aggregation (e.g. across placements, devices, channels, domains), and so we do not typically receive attention reporting at the individual, person-level.

In some ways, this may feel like an algorithmic black box that leaves us with a refracted interpretation of attention.

Consequently, while attention measurement may not track viewers' eyes at scale, it can make an inference regarding the quality of attention. Existing inference models by Oracle/MOAT, IAS, DoubleVerify, Adelaide, and others have been steering the quality assessment, assigning value across ad-buying and selling markets. In some ways, this may feel like an algorithmic black box that leaves us with a refracted interpretation of attention.

However, we are starting to see the integration of data signals that more closely represent organic human attention. For example, Adelaide's probabilistic model relies heavily on ad features and the ad environment to infer attention, but it also leverages the aforementioned gold standard of human attention measurement: eye-tracking. Adelaide's eye-tracking data comes from experiments and observations that study how eye movements differ depending on the various ad features and environments discussed. Although not always generated in real-time, the eye-tracking in Adelaide's model exemplifies how attention measurement can incorporate **human behavior** to more accurately predict attention.



The Future of Attention Measurement

The inclusion of behavioral data in attention measurement models such as Adelaide’s opens an exciting new chapter for attention measurement. However, there are other content engagement behaviors that should be included as indicators of attention – ones that start not with our eyes, but our fingers.

Clicking, scrolling, and hovering over an ad can all predict attention the same way that ad features do. An ad viewer is more likely to have attended to an ad if they moved their mouse into the ad space, and even more so if they clicked on a call to action. Most notably, this data can be measured in real-time, at scale.

With the rise of interactive ads, viewers are taking actions that range from scanning QR codes, to swiping through carousels, to playing mini games. This interactivity yields a wealth of behavioral data that can be used to weigh attention quality. Leaders in attention measurement must consider how their models can ingest the type of interactivity signals that lead to one of the highest forms of attention in advertising today: **experiential attention**.

FROM THE MEDIA BUYER’S PERSPECTIVE

In May 2024, Infillion’s Research team surveyed U.S. media buyers and decision-makers about their attitudes towards attention measurement. The survey collected 172 responses across media agencies and brand advertisers.

To what extent do you agree that ad attention and its measurement...?

(Completely or somewhat agree)



- Almost half of media buyers indicate that today’s attention measurement does not address the new-age problems of ad avoidance and device multitasking: two of the biggest threats to attention today.
- 42% of surveyed media buyers understand that attention measurement fails to capture behavioral data such as eye gaze, and just over a third agree that it cannot distinguish between earned vs. interruptive attention.
- While media buyers tend to agree that attention is linked with upper and lower funnel measures, they are skeptical of attention as a mechanism for either optimization or as a media-buying currency.

Key Takeaway

Before media buyers can confidently optimize or transact on attention, attention measurement must do better at operationalizing real-time, active attention.



Experiential Attention

Experiential Attention

In its current form, attention measurement fails to consider that not all attention is created equal. We often lend our attention begrudgingly. Think telemarketers, beeping smoke detectors, barking dogs, and unsolicited advice. You are coerced into attentiveness, typically because the distraction disrupted your previous task. You engage reluctantly, if at all. Your goal is to eliminate the distraction with minimal effort and switch to another task as soon as possible. This is interruptive attention.

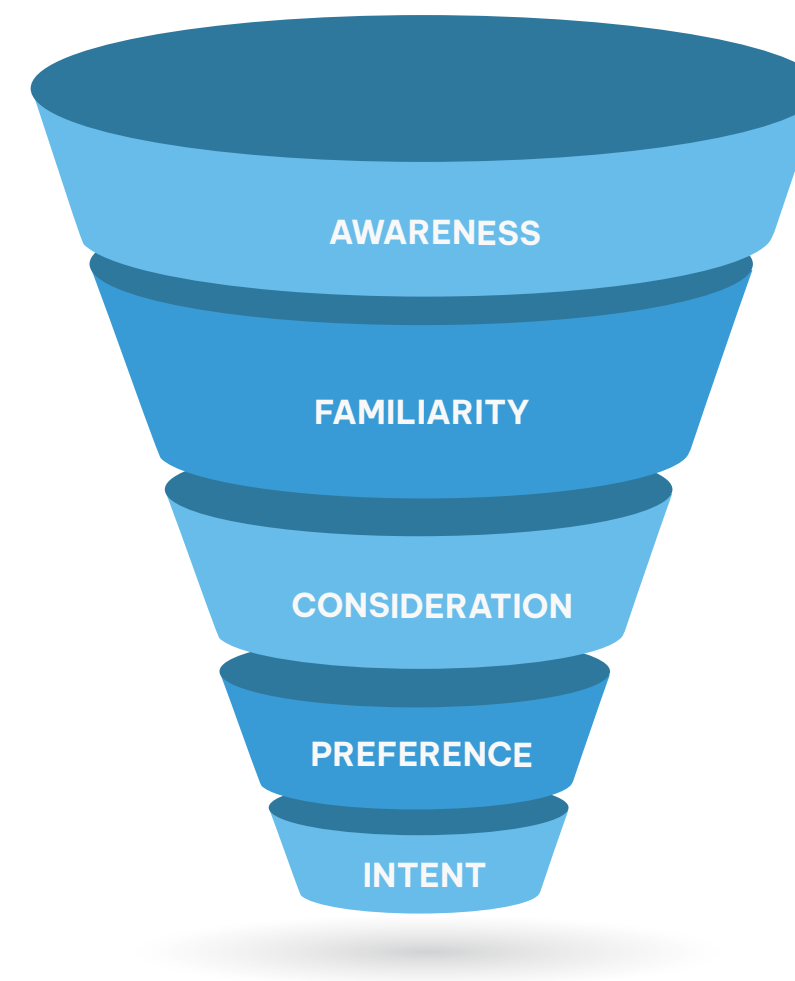
*Attention measurement fails to consider that **not all attention is created equal.***

Sometimes, we grant our attention freely and enthusiastically: long-awaited phone calls, hard-earned job interviews, concerts featuring our favorite bands. Unlike with interruptive attention, we highly value these moments and opt in to experience them as active, engaged participants.

This distinction matters, because how people pay attention directly affects outcomes. A large body of education research confirms that interactive learning drives improved knowledge retention compared to passive, one-directional communication.⁵ Making purposeful choices to lean forward, reflect, and interact triggers our active learning state, allowing us to more fully process information and retain it.

When it comes to advertising, we know that brand awareness is a reasonably low bar to clear with sufficient investment. However, consumers' consideration of, preference for, and purchase intent toward comparable products is dramatically influenced by their levels of familiarity with each available option. How do

Brand Funnel



brands close that crucial gap between awareness and familiarity? It's narrowed through education, which requires earned, active, and engaged attention – what we call experiential attention.

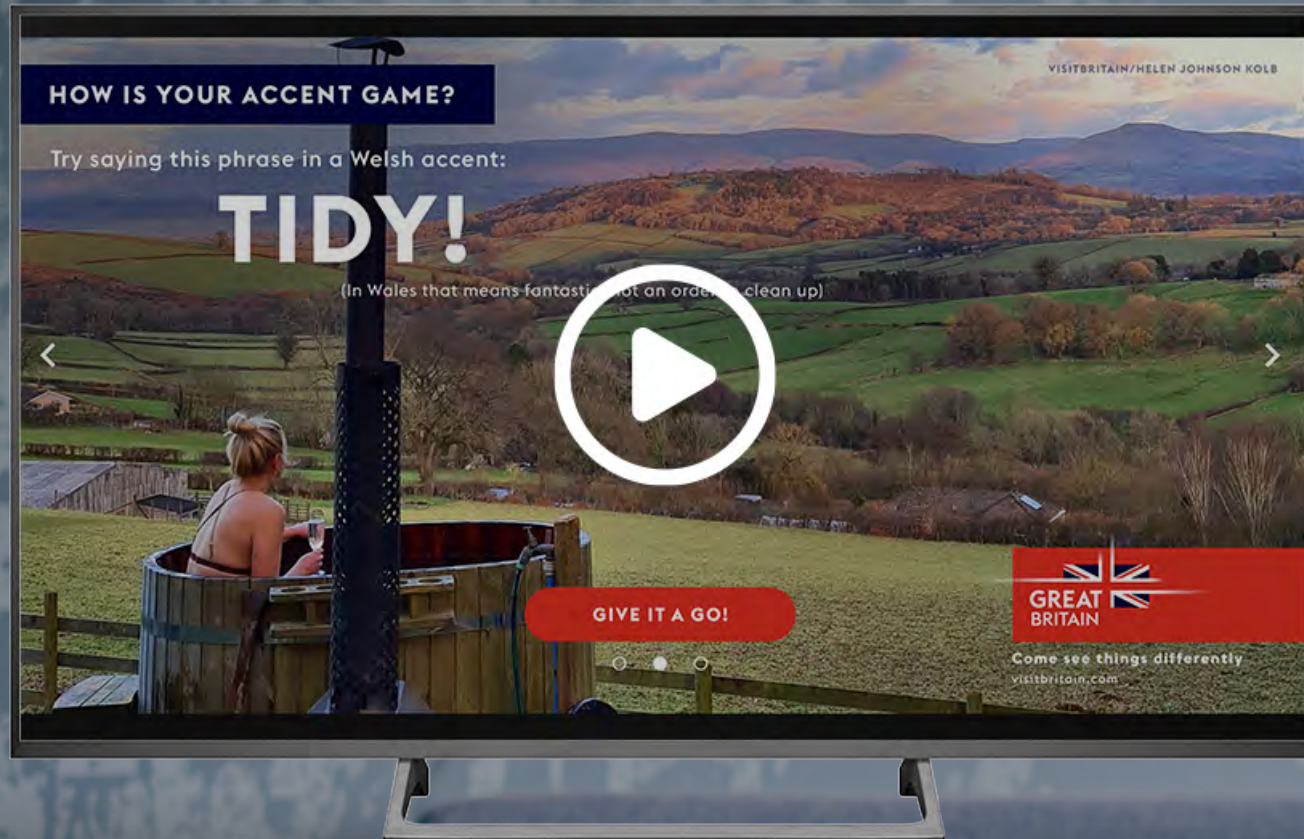
How people pay attention directly affects outcomes

Let's dive into the mechanics and look at some examples.



Case Studies

Case Studies



VisitBritain

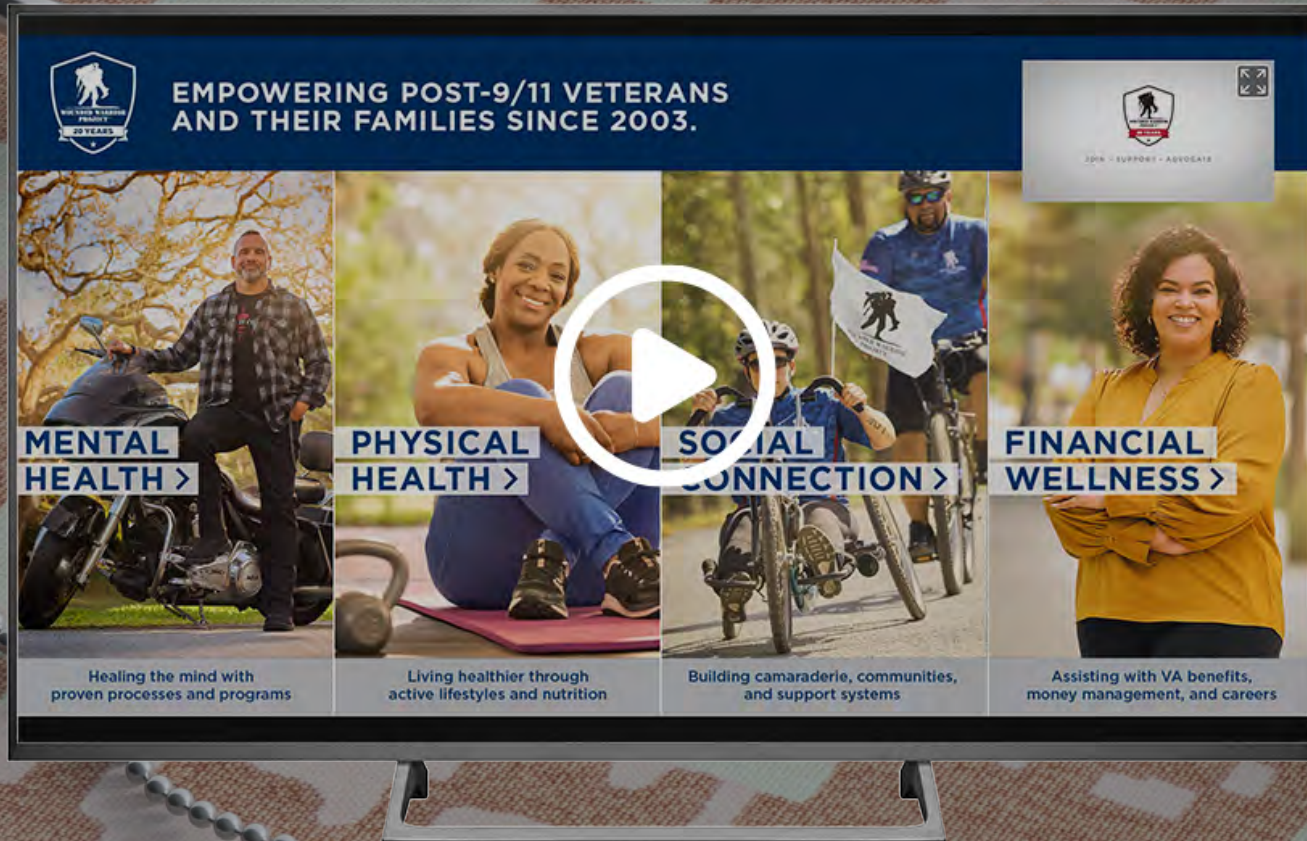
VisitBritain travel ads via Infillion's TrueX product generated deep engagement by leveraging a culturally British experience: speaking with a British accent. Using a device's microphone, viewers were immersed in an auditory game of faking an accent to test their pronunciation.

VisitBritain capitalized on viewer engagement with self-guided exploration and brand education, ultimately leading to significantly elevated levels of travel consideration, an 11% boost as compared to the control group.

While Infillion's ad format always guarantees attention, this unit performed above and beyond from an experiential perspective:

- Consumers were only required to spend 30 seconds in the unit but ultimately **stayed for an average of 51 seconds, a +70% gain**
- Only 1 interaction was required, yet the unit **averaged 4.9 clicks per session**
- And in terms of down funnel outcomes, the campaign earned a respectable **3.7% click-through rate and 0.5% QR code scan rate**

Case Studies



Wounded Warrior Project

Advertising for the Wounded Warrior Project aimed to increase awareness of and engagement with the nonprofit on the eve of their 20th anniversary. Addressing a niche audience of military veterans, families of veterans, and potential donors, the WWP leveraged sponsored ad breaks and rich media units that invited viewers to actively learn about the range of support offered to former service members.

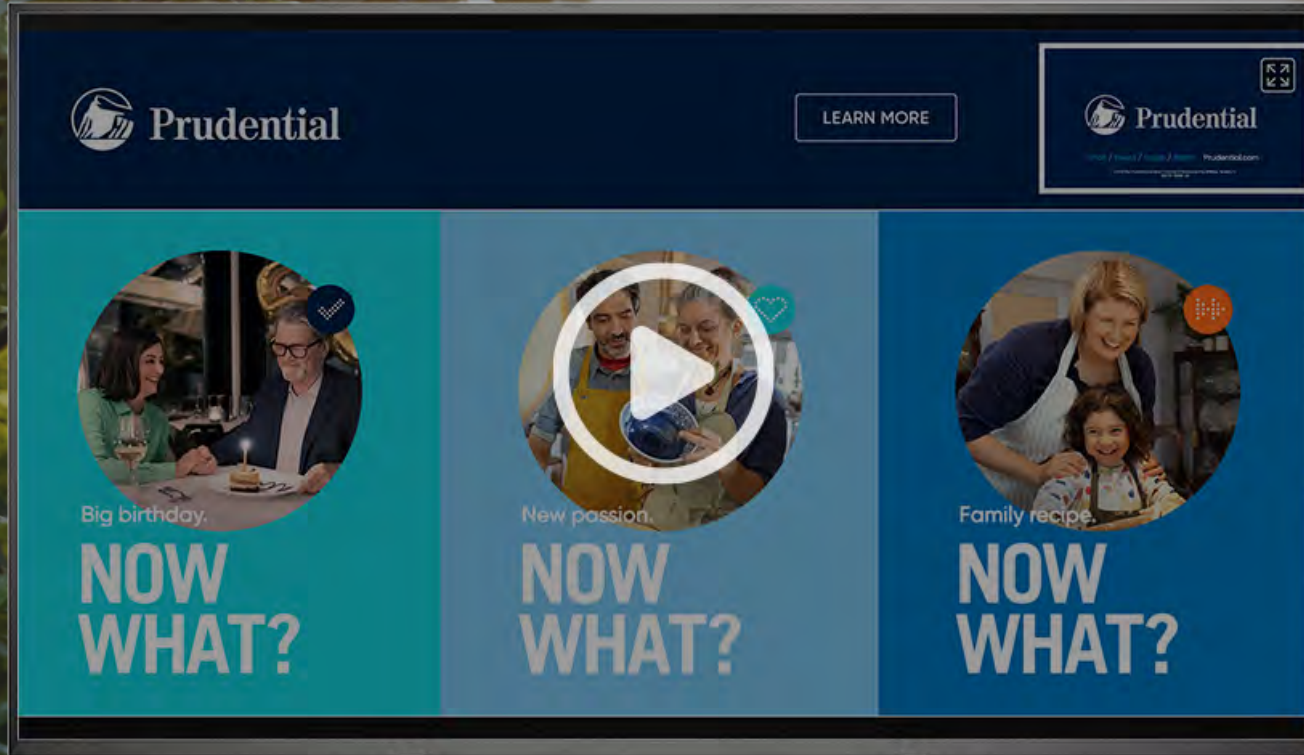
CAMPAIGN PERFORMANCE

Experiential attention from sponsored ad breaks delivered highly successful outcomes:

46 secs
time spent

3.1 clicks
in the unit

Case Studies



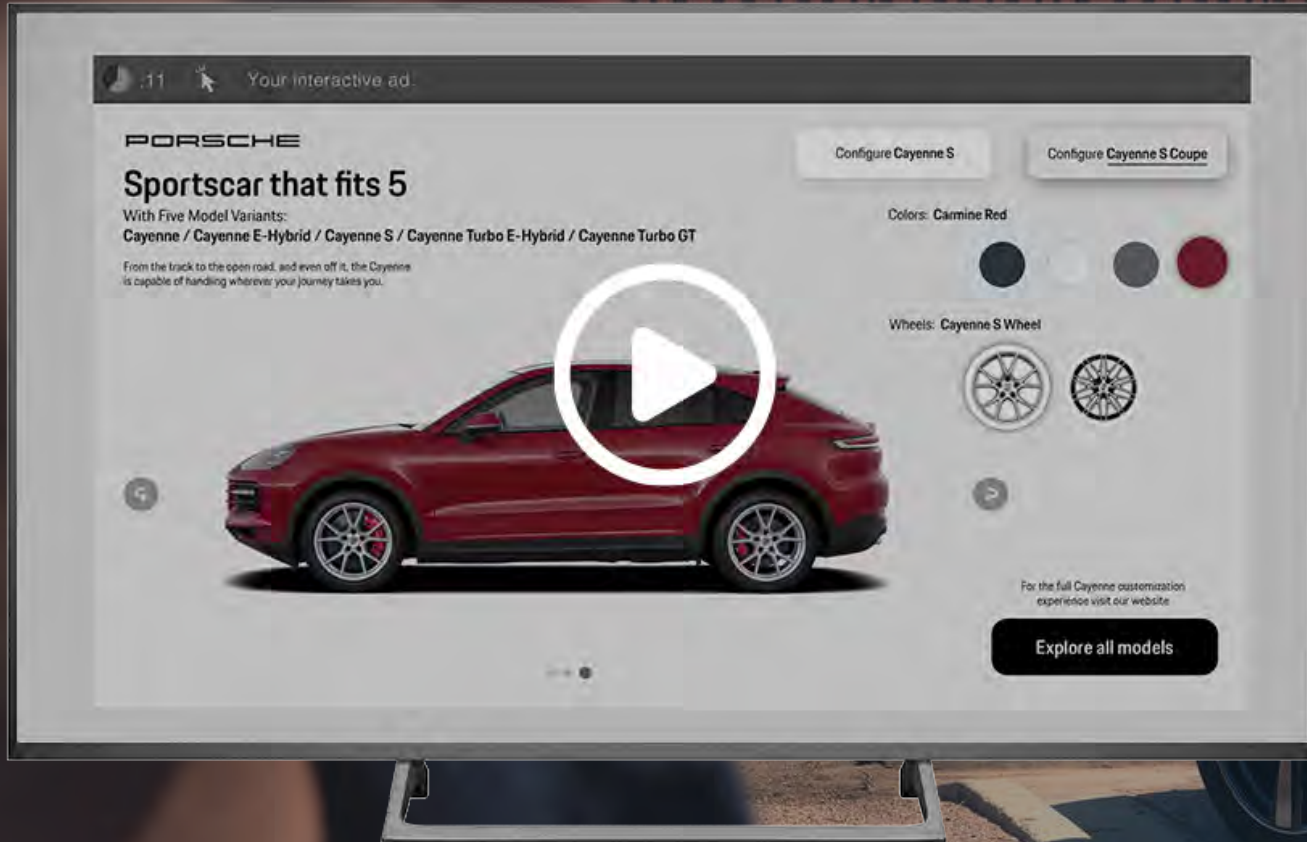
Prudential

Prudential offers more than retirement solutions, but consideration of their other services was low: just 40% among their target audience. However, by coupling real human attention with interactivity in engaging ad units, Prudential created a positive learning environment. In doing so, they enabled viewers to memorably deepen their understanding of Prudential’s menu of financial services. Post-campaign, their brand funnel looked radically different, indicating high receptivity among audiences.

CAMPAIGN PERFORMANCE

Awareness, familiarity, and consideration each increased by a statistically significant 10 points, broadening the funnel in upper and middle measures by 12–27%. While there is still more opportunity in the lower funnel, experiential attention drove meaningful brand funnel impact.

Case Studies



Porsche

When it comes to automotive, consumers like to be in the driver's seat. With interactive engagements, Porsche enabled viewers to configure the new Cayenne according to their preferences for model design and aesthetic details. Customizing your vehicle is a very personal experience, and the performance results here indicate that the experiential attention activated through this choice-based exercise translated into meaningful downstream outcomes, shattering auto category averages.

CAMPAIGN PERFORMANCE

4.7 clicks per unit
vs. an auto average of 1.5

6.7% CTR
vs. an auto average of 1.3%

In addition, the configurator significantly changed the shape of the Porsche Cayenne brand funnel despite strong starting baseline levels for each measure:

- +13%** in awareness
- +16%** in familiarity
- +17%** in consideration
- +15%** in preference

As illustrated, highly interactive units that grant agency to the viewer ultimately deliver high-quality experiential attention, and subsequently, standout performance. Furthermore, viewers always opt-in to an Infillion TrueX ad in exchange for a reward: shorter ad breaks in streaming, access to gated content on premium sites, and credit for in-app experiences. Thus, when the audience is asked to “pay attention,” they receive value back, just as anyone would hope to receive something in return for their time or attention. Importantly, the viewer is in control; they are free to experience the ad on their terms and choose how to interact. By respecting the viewer’s time and delivering a high-quality, interactive experience, Infillion is able to guarantee the lean-forward, experiential attention necessary for delivering ad engagement and performance.

To test the consistency of this theory, Infillion partnered with Adelaide to quantify attention quality on seven ad campaigns last year. On average, engagement media scored 51% above Adelaide’s 2023 benchmarks across all devices and channels, affirming Infillion’s storied legacy of stewarding attention-based campaigns.

“Infillion engagements and custom formats generate attention scores consistently above Adelaide benchmarks, and we look forward to partnering with Infillion to incorporate additional quality signals into our attention measurement solutions.”

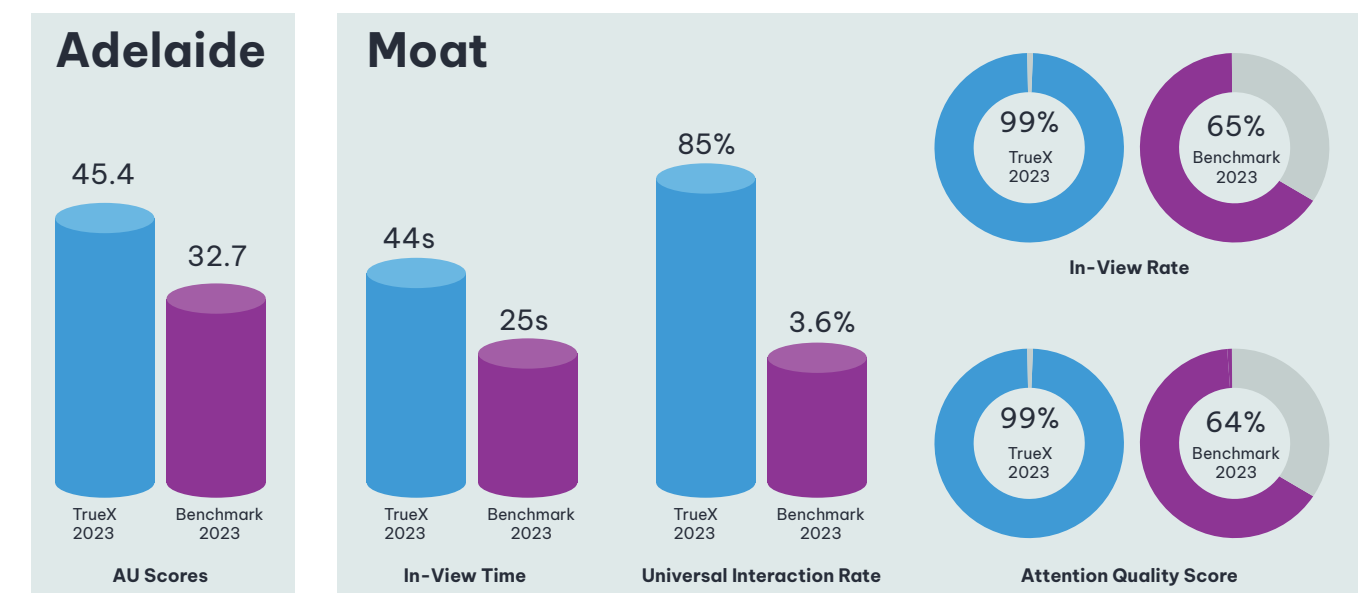
– Marc Guldimann, Co-Founder and CEO of Adelaide

Infillion also outperformed Oracle’s Moat benchmarks to a similar degree, driving an Attention Quality Score 55% higher than Q4 2023 industry averages.

“As a long-term Moat client that historically achieved top-tier Moat Scores, we were thrilled to see Infillion’s TrueX program achieve such strong results on our new Attention Quality Score, a composite metric that provides a more comprehensive view of attention.”

– Rachel Creel-McGuire, Vice President, Product Management, Oracle Moat

TrueX Attention Measurement Performance





The Road Ahead

The Road Ahead

Without first capturing high-quality attention, advertisers cannot benefit from meaningful downstream activity such as increased consideration, purchase intent, or sales. Attention scores also provide critical context for better interpreting classic metrics like CTR and VCR. Consequently, maximizing ad performance hinges on our ability to 1) identify the best predictors of human attention, and 2) design ad campaigns leveraging those predictors.

However, as we look to iteratively improve upon attention measurement, we must remember that attention comprises a spectrum. Marketers should strive to deliver premium experiential attention to clients where possible, rather than interruptive attention. This earned and highly engaged attention triggers deeper-level thinking that allows our attitudes, preferences, and decision-making frameworks to become more malleable and receptive to new information. While some cosmetic ad or placement features can improve the likelihood of viewer attentiveness, these signals are indirect compared to the actual behavioral outcomes generated by experiential attention, such as engagement with an ad.

To capture experiential attention, marketers must do three things:



Let audiences opt in. Highly disruptive ad formats like pop-ups, interstitials, and auto-playing videos coerce audiences into viewing, leading to annoyed, lower-quality attention.



Facilitate a value exchange. Barter with your viewers, such that they choose to “pay” attention. This value exchange can take many forms: fewer ads, shorter ads, virtual game currency, lowered paywalls, promo codes, and more.



Provide ample interactivity. Build ads that invite high engagement by offering opportunities to explore the unit or personalize the ad experience: leverage games, quizzes, hotspots, carousels, and multiple video options.

Together with thoughtful messaging and targeting, these ingredients will maximize your chances of breaking through the noise, capturing active attention, memorably connecting with viewers, and driving robust campaign performance.

Be sure to keep this tab open; you may want to share [the link](#) later!

About Infillion

Infillion is the only global media-buying platform, combining the power of MediaMath's industry-leading data and technology with the unrivaled performance of TrueX's interactive video and CTV technology. The company is one of the most awarded tech companies in the media, marketing, and advertising industries and was named one of Fast Company's Most Innovative Companies 2024.

Infillion works with more than 1,400 of the world's leading agencies and brands, with premium managed- and self-service cookieless media solutions that deliver guaranteed attention in an increasingly opaque media environment.

Learn more at infillion.com



Endnotes

- 1 <https://www.imore.com/someone-finally-maxed-out-mac-pro-6000-google-chrome-tabs>
- 2 Loh KK, Kanai R. [Higher media multi-tasking activity is associated with smaller gray-matter density in the anterior cingulate cortex.](#) PLoS One. 2014 Sep 24;9(9):e106698. doi: 10.1371/journal.pone.0106698. PMID: 25250778; PMCID: PMC4174517.
- 3 Ophir E, Nass C, Wagner AD. [Cognitive control in media multitaskers.](#) Proc Natl Acad Sci U S A. 2009 Sep 15;106(37):15583-7. doi: 10.1073/pnas.0903620106. Epub 2009 Aug 24. PMID: 19706386; PMCID: PMC2747164.
- 4 [Who Multi-Tasks and Why? Multi-Tasking Ability, Perceived Multi-Tasking Ability, Impulsivity, and Sensation Seeking](#) Sanbonmatsu DM, Strayer DL, Medeiros-Ward N, Watson JM (2013) Who Multi-Tasks and Why? Multi-Tasking Ability, Perceived Multi-Tasking Ability, Impulsivity, and Sensation Seeking. PLOS ONE 8(1): e54402. <https://doi.org/10.1371/journal.pone.0054402>
- 5 Ibrahim, M., Al-Shara, O. (2007). [Impact of Interactive Learning on Knowledge Retention.](#) In: Smith, M.J., Salvendy, G. (eds) Human Interface and the Management of Information. Interacting in Information Environments. Human Interface 2007. Lecture Notes in Computer Science, vol 4558. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-540-73354-6_38