WHITE PAPER

Attention and Recall

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State of play

An impression is an opportunity or potential to view. Media is sold on this potential rather than whether someone has actually seen the ad or not. On average, 75% of the ads you pay for don't aren't seen by a human, which means they don't deliver the value you think they do.

It would seem that attention, as a measure of ad impact and ad delivery, is experiencing a groundswell of interest and uptake. Actual human viewing behaviour is getting the focus it deserves. As attention measurement moves towards mass-market acceptance the range of attention vendors will broaden and along with it the way human attention should be measured and used runs the risk of dilution and confusion.

The problem

The problem is, when no attention is paid to an ad, the ad can have no positive impact on business outcomes. It's actually that straightforward. No attention. No impact. Impression reform is needed so that we can move a measured impression from an opportunity-to-see to a Verified Human View.

Media trading should be fair and accountable. We know from our research, and others, that human attention is highly valuable and will aid in driving fairness and accountability.

Advertisers have invested large parts of their budgets into media planning and trading systems operating on traditional buying measures. If we are asking advertisers and agencies to change how they do things, it's important to demonstrate the value of attention.

Attention and impression reform

There is no single pill. It's easy to confuse what we want with reality. We want attention to be a complete picture of the consumer brain and we want attention to show a true causal link to sales. This might be even slightly possible if advertising persuades, but it doesn't. Humans are more complex than that.

On understanding a consumer's brain, biometric technologies, like fMRI, have delivered case evidence into the processing of advertising[1], but for an industry to trade on attention it needs broad-reaching, always-on, scalable collection of human attention data. The best technical advances to achieve these things include: facial detection (is a face present), facial recognition (is this face different to the last one), and facial coding (emotion AI) delivered via an untethered interface. These technologies can measure whether someone is present, looking (or not) at advertising and have a smile on their face.

Simply knowing if someone is present and whether they are looking (or not) at advertising is light years ahead of the current impression system. Research from those of us who collect visual attention shows that both the TV ratings systems and digital impressions tell us nothing of the fleeting reality of a view. Having simple data, independent of the platform owners, that tracks human viewing and can identify platform (and creative) deficiencies, is inherently valuable.

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[1] http://web-docs.stern.nyu.edu/marketing/RWinerPaper2015.pdf

Device data looks inward

When something is hard to measure we reach for the easy, and typically, substandard proxy. Most of these proxies are what we call 'inward' metrics - they measure the device use and not the actual human viewing. You know what they are: ad duration, ad pixels on screen, hover rates etc. We collect them too, but we have a clear idea of their limitations. They offer technical data around the opportunity to see, and the attention they offer is assumptive. But, when device data is combined with facial data, the depth of inquiry can be vast.

Recall doesn't tell us what we need

Recall is another commonly used proxy. Some say it represents explicit memory and sales impact. In terms of sales uplift, it does reflect previous brand usage and brand size. To test recall as a metric we added recall survey measures to the back end of our typical attention collection to cross check the relationship between recall and choice. Note that we always collect brand usage as a sample validation. The study was across 2 countries and 4 platforms. Respondents were exposed to a number of ads in real-time while facial footage was collected via the device camera for our attention models; after the viewing session we collected brand choice from a virtual store.

In line with literature, our data show that brand choice and previous brand usage are related: heavy buyers are 9x, and medium buyers 3x, more likely to choose the brand compared to light buyers. And it shows that recall is related to brand choice, accounting for about 35% of the variation in choice. But, also as expected, we can see that big brands (as defined by a market share baseline, not our own interpretation) account for around 95% of this variation. What recall actually tells you is what you should already know from reading anything Andrew Ehrenberg wrote—big brands have more buyers who buy you more often and notice you more. You don't need to survey recall, you could predict it from your penetration and loyalty data.

Recall as a proxy for attention is flawed when multiple brands are exposed in one viewing session or across platforms. One of the main reasons people think it works stems from the notion that advertising persuades and that recall is a necessary condition to change behaviour or attitude. But there is little to no evidence that an incremental sale will follow, and given advertising is not persuasive, there is actually more evidence that it won't.

Recall and STAS

We refer to Short Term Advertising Strength as STAS. In simple terms it is a measure that shows brand choice once a market-share baseline has been applied. Our data show no evidence that higher recall leads to incremental sales. Recall can tell you the level of attention and brand choice expected given your market penetration. But it rarely tells you whether your ad will be successful in driving sales uplift over what is expected.

STAS is calculated by determining the proportion of category buyers who chose a specific brand having NOT been exposed to brand advertising, and comparing it to the proportion of category buyers who chose and WERE exposed to the same brand advertising (test group). A score of 100 indicates no advertising impact in that those who were exposed to the advertising were just as likely to purchase as those who were not.
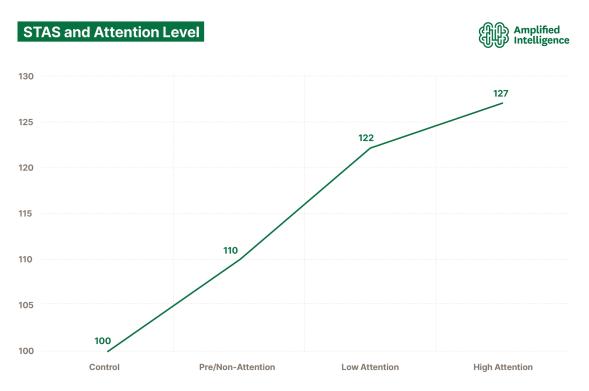
Attention and STAS

We find no relationship between recall and STAS, but we do see a relationship between visual attention and STAS. This is extraordinarily important. Given advertising is not persuasive and advertising effects are generally small, we really can't expect more.

The relationship is not perfectly linear - it's more like cousins than siblings. It's not causal either. Humans are more complex than that. Consumer behaviour is part science, part unexplainable. The science part is this: when no attention is paid, ads have no impact.

As part of the Dentsu Attention Economy Phase 1 collection in 2019 (3 countries, 3 platforms, 17,000 video ads), we found that low-attention processing delivers more value than most people give it credit. The greatest uplift in sales impact occurs when a viewer moves from a pre-attentive state (non-attention) to low attention. Let's be clear here, high attention still drives the greatest impact in absolute terms, but we see that the biggest jump in STAS happens between no attention and low attention.

This is why attention is related to STAS and recall isn't. Recall is a measure of explicit memory, whereas visual attention can measure both—implicit and explicit memory (technology dependent). If you're using recall as a measure, you're missing out on measuring implicit memory where viewer attention is under the threshold of full consciousness.
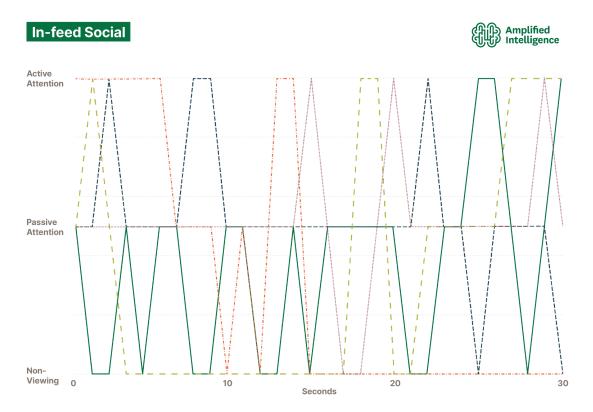
STAS and Attention Level

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The Attention Economy and How Media Works, Karen Nelson-Field, Palgrave Macmilian, 2020

Attention switching

It's just as well that low attention offers value to incremental sales given that more of our viewing seconds occur in this 'zombie' low-attention state compared to the rarer active attention mode. We know that viewers switch, frequently and abruptly, in and out of focus. We also know that different platform environments and formats are conducive to more switching than others.

Fortunately, simply noticing an ad can nudge a sale.

What value do attention metrics offer?

1. Attention is a metric with the robustness and resilience needed for impression reform. It moves us from an opportunity-to-see to a verified human view. This is huge.
2. Visual attention measures one of the things linked to incremental sales uplift - implicit (and explicit) processing.
3. In these early days, attention is incredibly valuable even as a supplementary layer of data to be fused with existing planning and trading systems. Advertisers don't have to do a 180 from their existing (and very expensive) systems.
4. Attention metrics can ultimately bring transparency to the ecosystem and teach advertisers how to treat attention as a finite resource - ethically and sustainably.

What next?

If you would like to use attention metrics for media planning, or to Attention Adjust™ an existing campaign, have a look at attentionPLAN™.

If you are thinking of buying media using attention metrics, keep an eye out for our new product attentionTRADE™ or contact us for a chat.

If you have more questions, just send them through to hello@amplifiedintelligence.com.au and one of our team will find an answer for you.