the Advertising Research Foundation

AUDIENCE xSCIENCE 2024

The Value of Attention is Nuanced by the Size of the Brand

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#ARFAxS

The Nuance of Size

Understanding Interaction Effects and Their Impact on Attention Products

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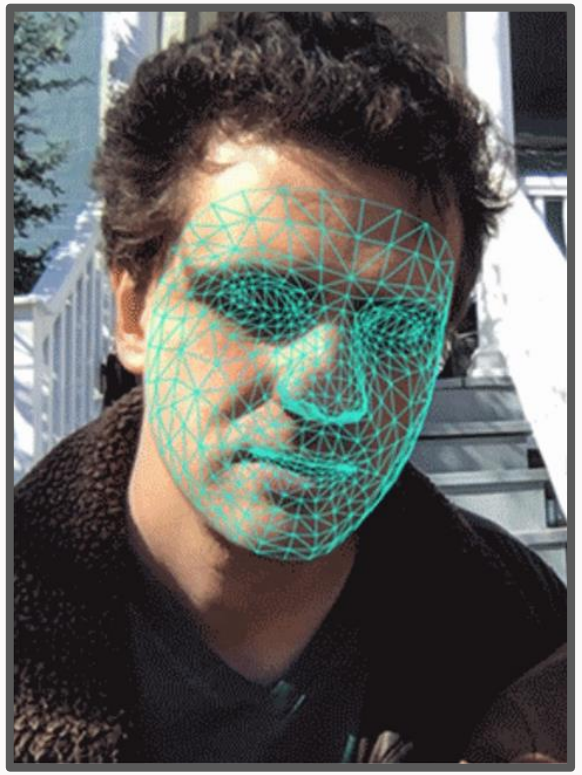
Amplified Intelligence

Attention data falls broadly into two buckets; ‘inward’ and ‘outward’ facing.

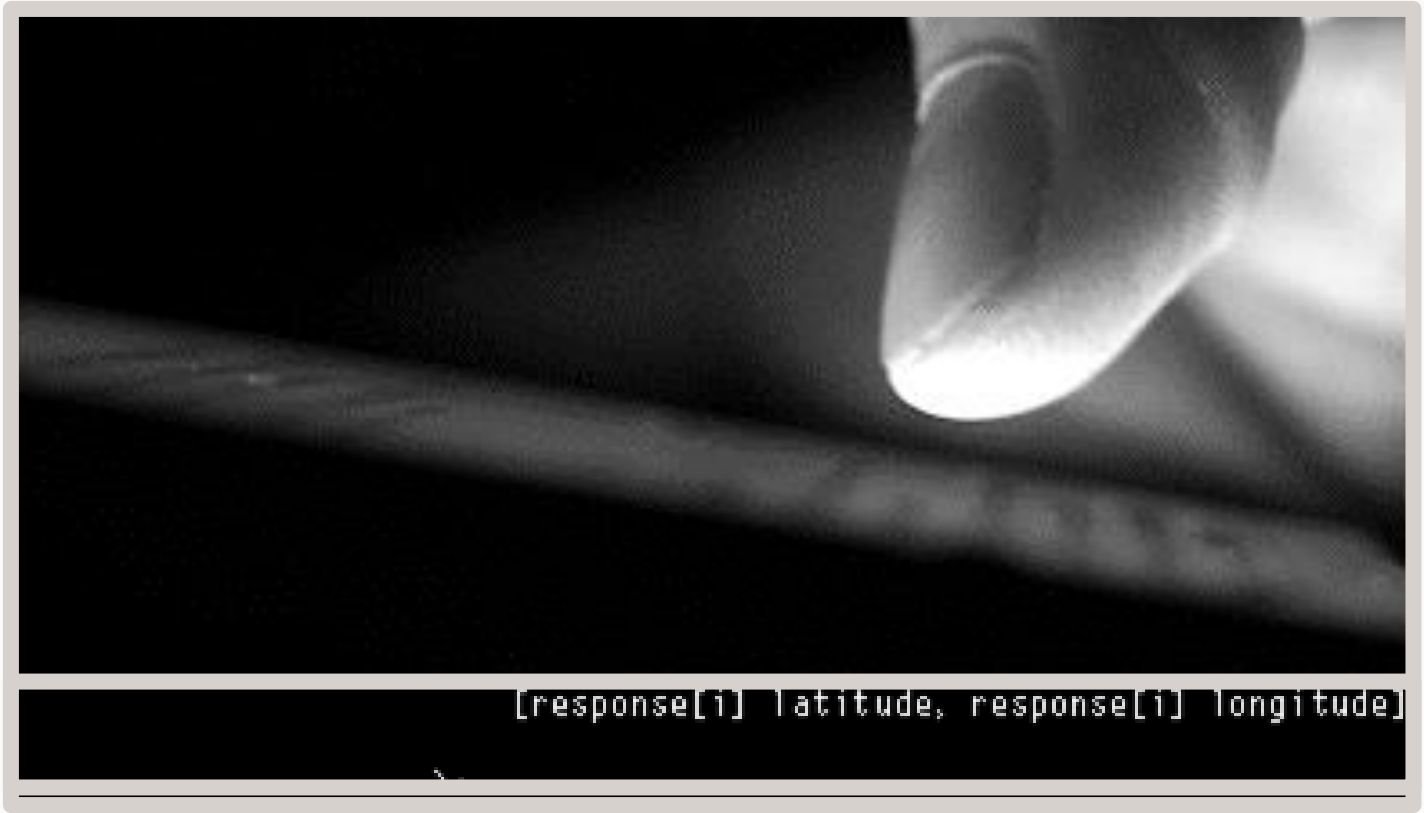
Human via cameras (or other biometric)

Observed
Human Behaviour
Deterministic



Synthetic via pixel tags (data signals)

Implied Human
Behaviour
Probabilistic



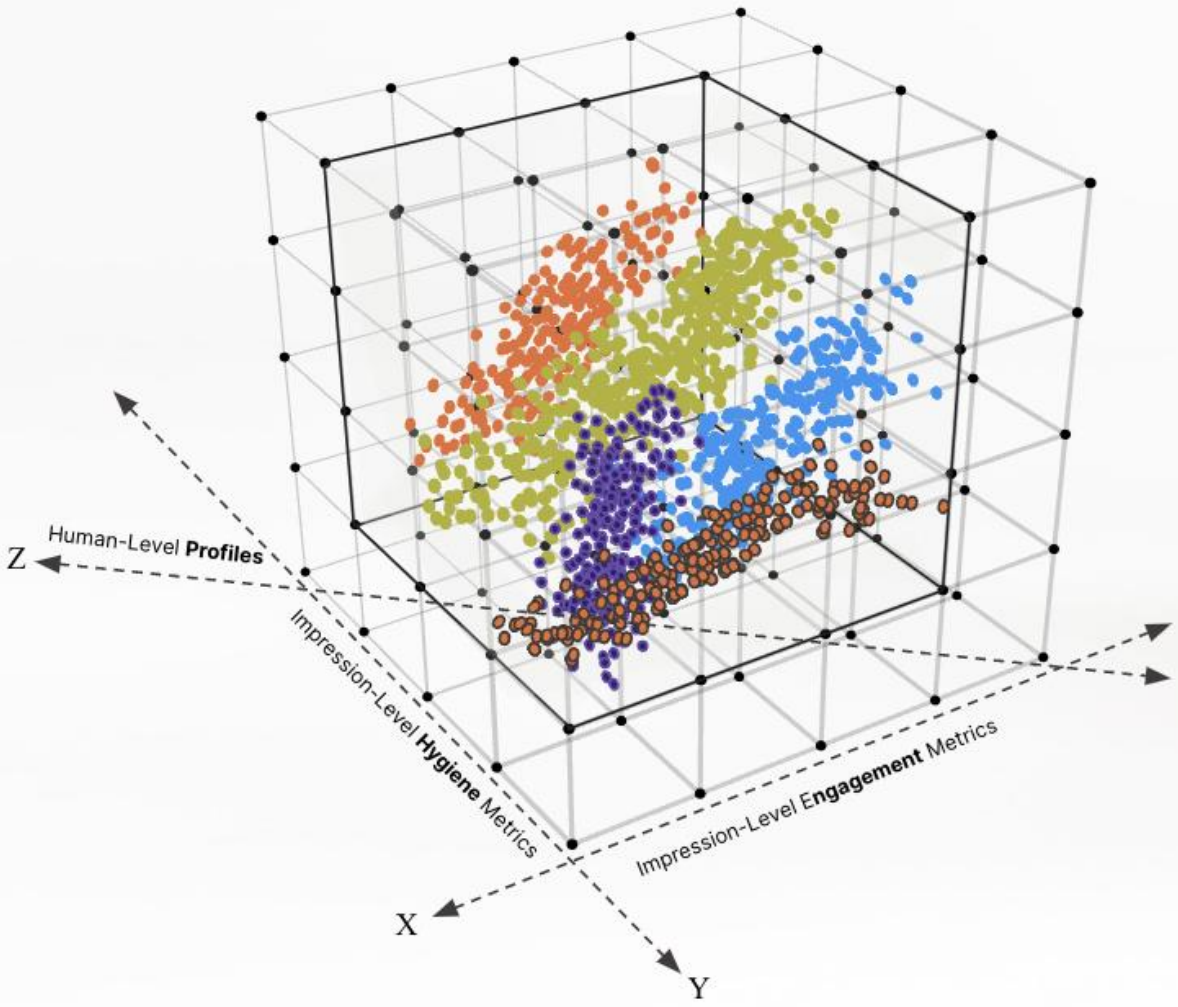
Each data set has its own limitations.

Footage of humans in real-time = ultimate attention accuracy, but has a **scale** issue.

Impression data alone is scalable, but its ability to predict human attention **accurately** is extremely limited.

Human viewing behaviour is complex, and varied by platform.

So metrics without ‘Ground Truth’ miss the important nuances.



What nuances can we see under the hood of human attention?

Refresher: Active/Passive/Non

Active Attention

Mobile: Looking directly at the ad
Desktop: Looking directly at the ad
TV: Looking directly at the ad

Passive Attention

Mobile: Eyes on screen, not on ad
Desktop: Eyes on screen, not on ad
TV: In the room but not looking at the TV

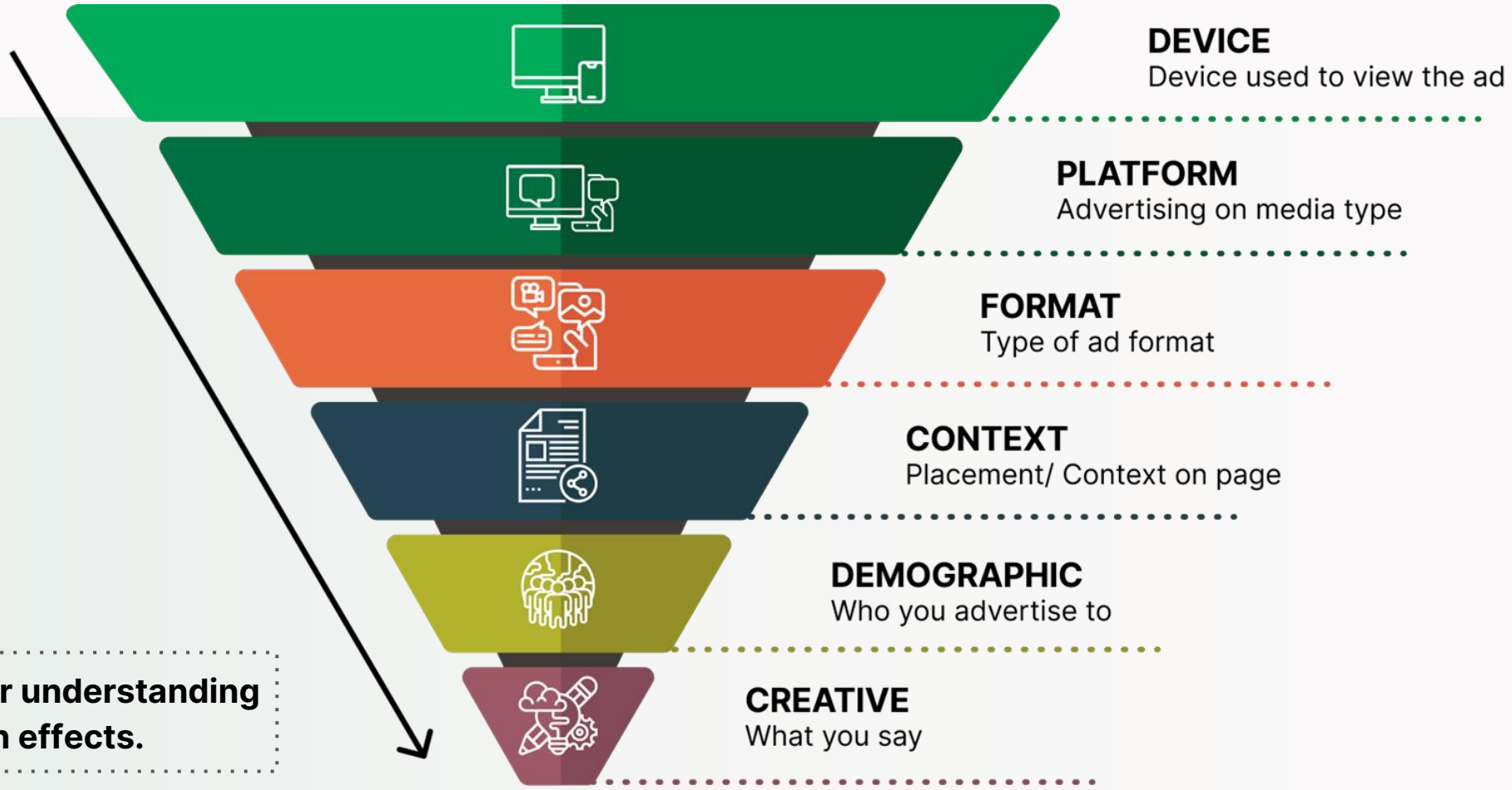
Non Attention

Mobile: Eyes not on screen, not on ad
Desktop: Eyes not on screen, not on ad
TV: TV is on but person is not in the room

But attention outcomes vary, even when the usual suspects are considered in the model i.e. ad unit, time-in-view, pixels on screen etc

Hierarchy of Attention

The order in which different elements impact the range of attention you can achieve.



The beginning of our understanding of interaction effects.

We built a Large Scale Validation Model for Interaction Effects and ‘Choice’.

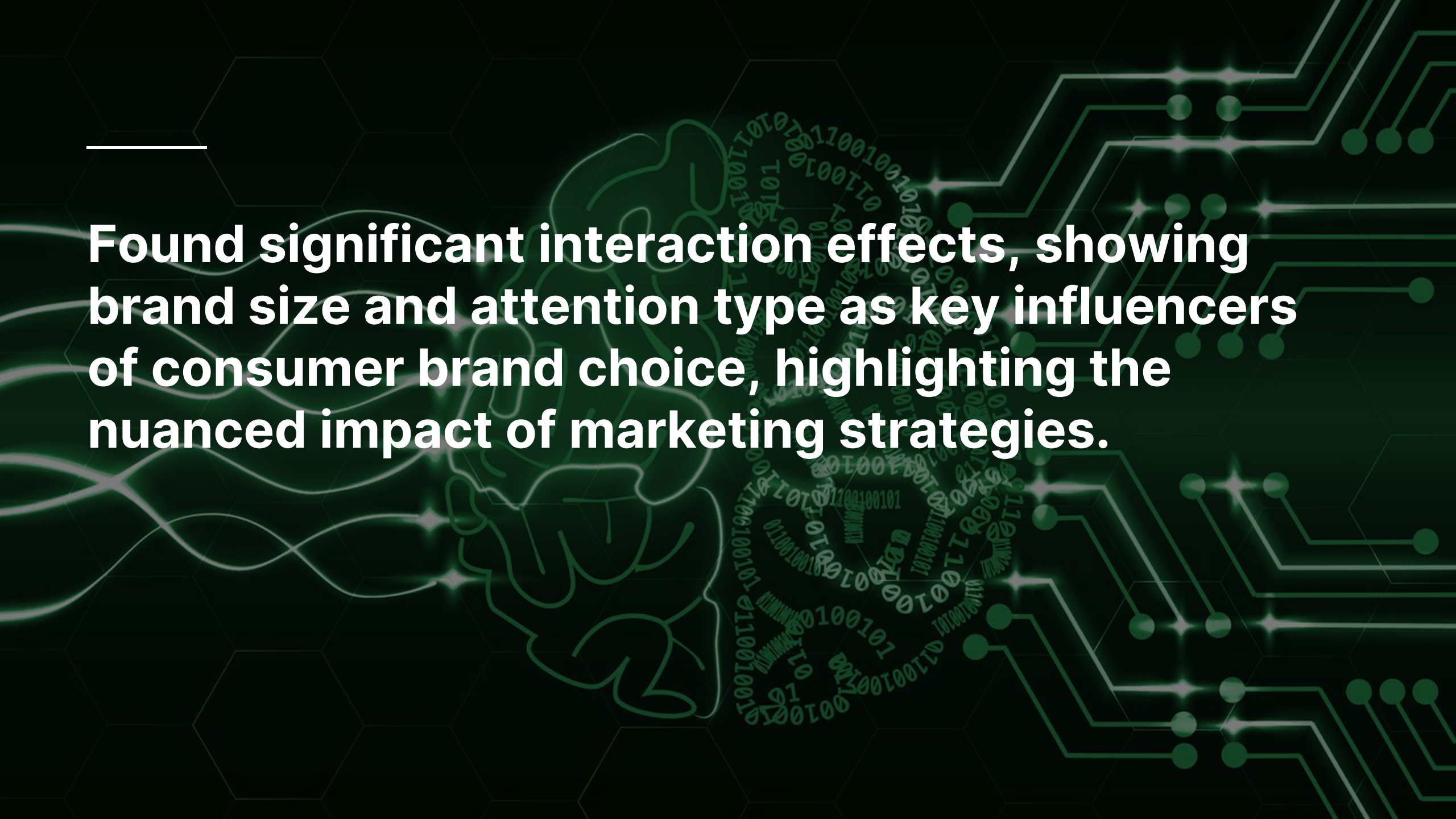
A. Employed Logistic Regression using Maximum Likelihood Estimation (MLE), tailored for modeling binary outcomes like brand choice.

B. Analyzed 41,801 observations from various product categories and brands, providing a rich dataset for robust analysis.

C. Dependent variable, 'choice' - was a brand selected/or not competes with other brands in its category.

D. Tested critical factors: brand size and attention type, demos all with significant effects ($p < 0.001$).

E. Demonstrated strong predictive accuracy with CV Accuracy: 0.705 (±0.002) and Test Accuracy: 0.707.



Found significant interaction effects, showing brand size and attention type as key influencers of consumer brand choice, highlighting the nuanced impact of marketing strategies.

Finding #1: Passive and active attention work differently for different sized brands.

The dependent variable is 'brand choice'. Accounting for interaction effects, the model predicts the probability of an event occurring, and its coefficients. All relationships are significant p= < 0.000

The size of the brand mediates the value active and passive attention seconds in brand choice outcomes.

Passive Attention Works Harder for Bigger Brands

Big brands get slightly more brand choice outcomes from passive attention than active attention.

Active Attention Works Harder for Smaller Brands

Small brands get significantly more brand choice outcomes from active than passive attention.

Number of Observations:41801. Big brand: Brand Choice-> baseline (>25%). Small brand: Brand Choice-> baseline (<25%)

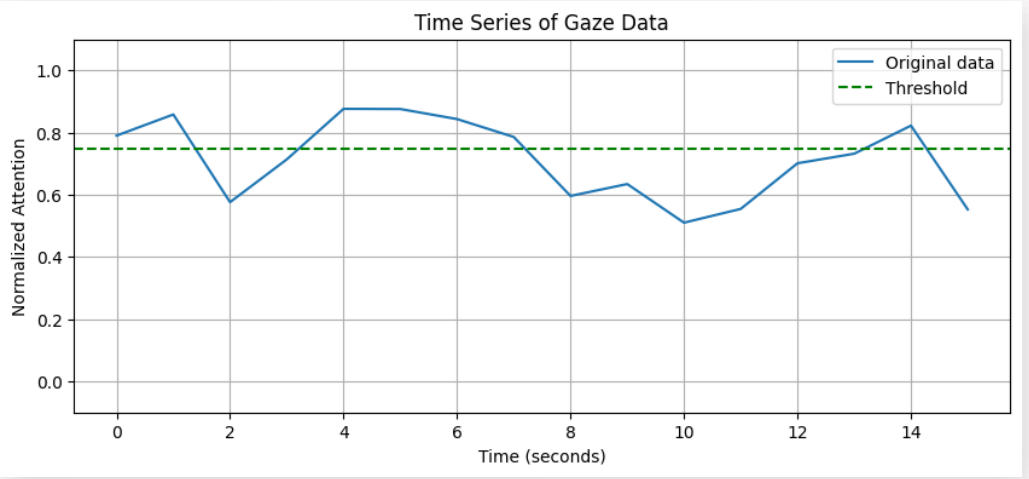
Finding #2: Attention switching (focus) mediates outcomes.

The dependent variable is 'brand choice'. Accounting for interaction effects, the model predicts the probability of an event occurring, and its coefficients. All relationships are significant p= < 0.000

How humans view, not simply how long they view, or if they do or dont view (binary), is important to outcomes.

Attention Switching

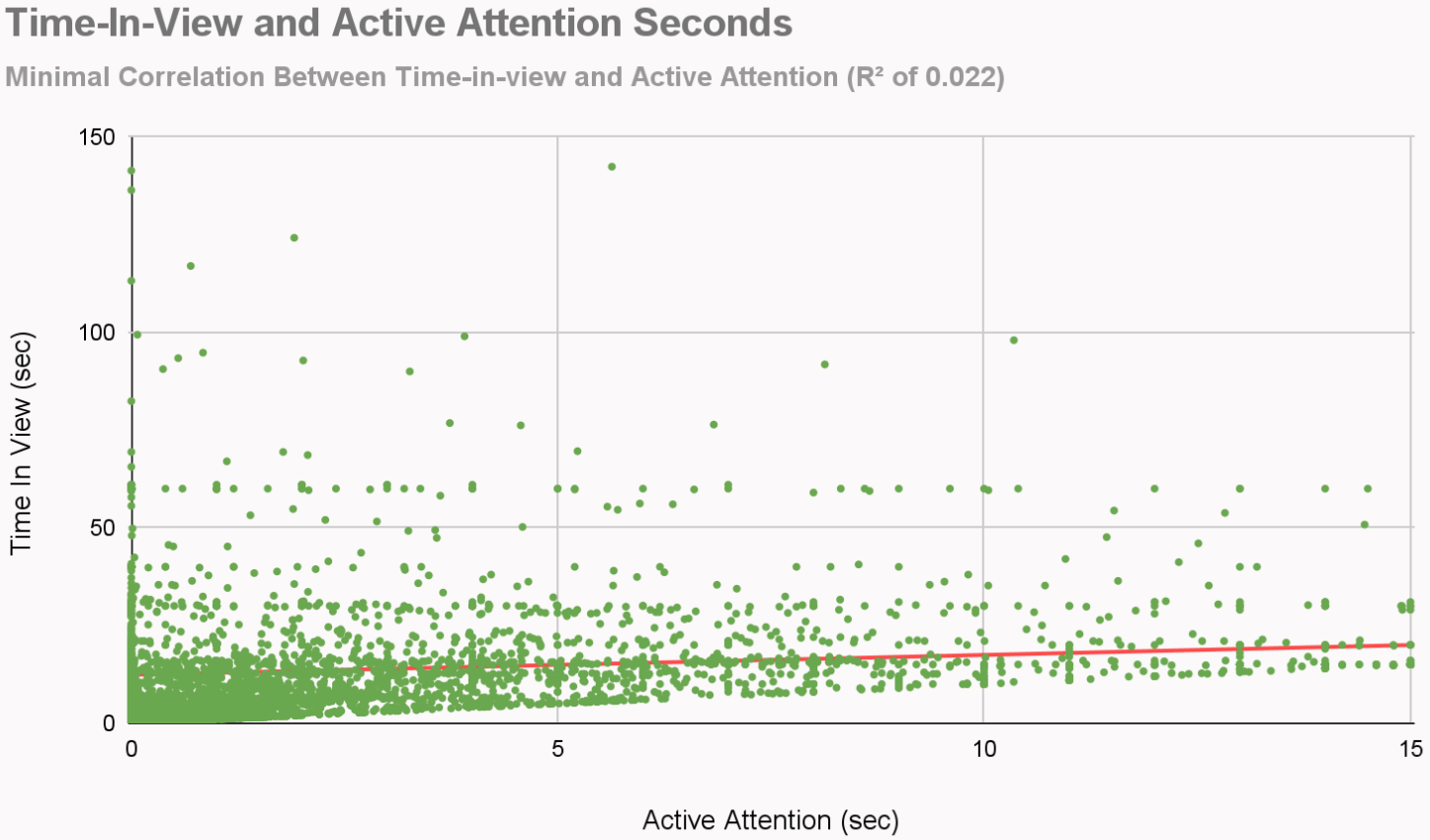
Attention is made up of both time and focus. Focus is about viewing consistency or fixation, direction of switching. More switching, less likely to produce an outcome.



Number of Observations:41801. Big brand: Brand Choice-> baseline (>25%). Small brand: Brand Choice-> baseline (<25%)

This is why Time-in-View fundamentally fails.

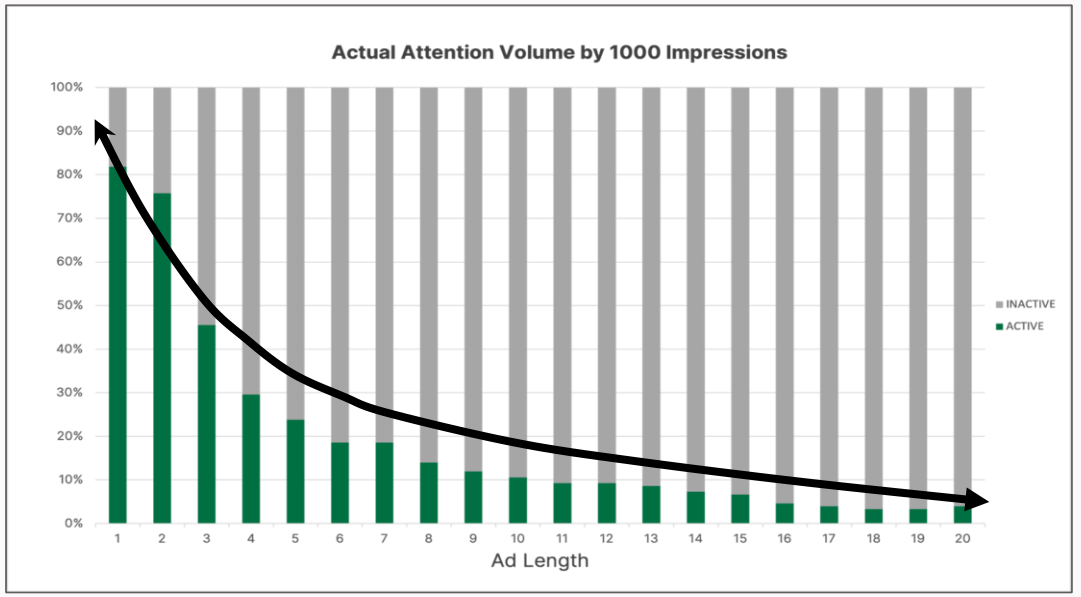
Time-in-View, has became the most critical independent variable of modern measurement, but doesn't account for attention decay or switching.

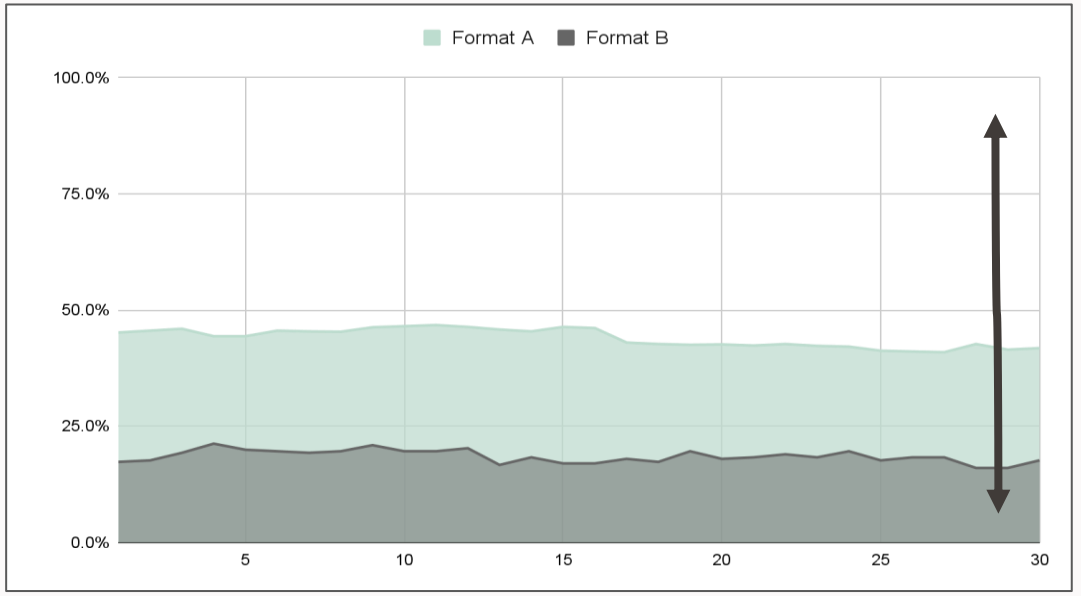


Also why these switching factors are vital in attention products.

Attention Decay:
how quickly attention diminishes (sustained attention x time)

Attention Volume:
people attentive (attentive reach x time)





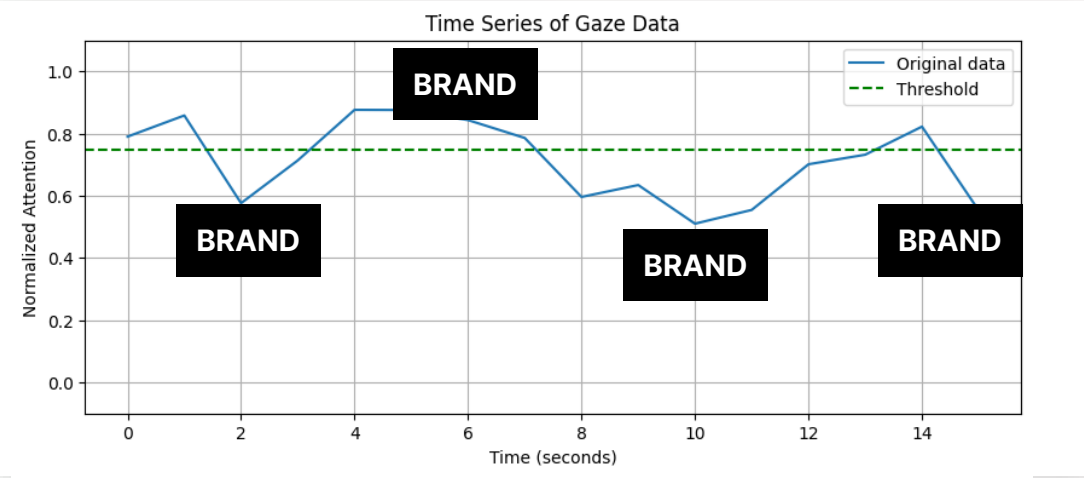
Finding #3: Eyes-on-Brand attention is vital to outcomes.

(*same data set - different study to interaction effects regression)

When eyes are not exposed to the branded moment, outcomes are sig. impacted.

Eyes on Branded Moments

It might seem obvious but underneath switching behaviour, branded moments appear, but when the brand is missed it sig. Impacts outcomes.



When the brand is missing we fill in the blanks.

Even leading brands are being misattributed for smaller competitors.

The next generation of buyers are being ‘untrained’.

Implication #1: Human attention is nuanced, making it difficult to rely merely on aggregated non-human metrics for accuracy.

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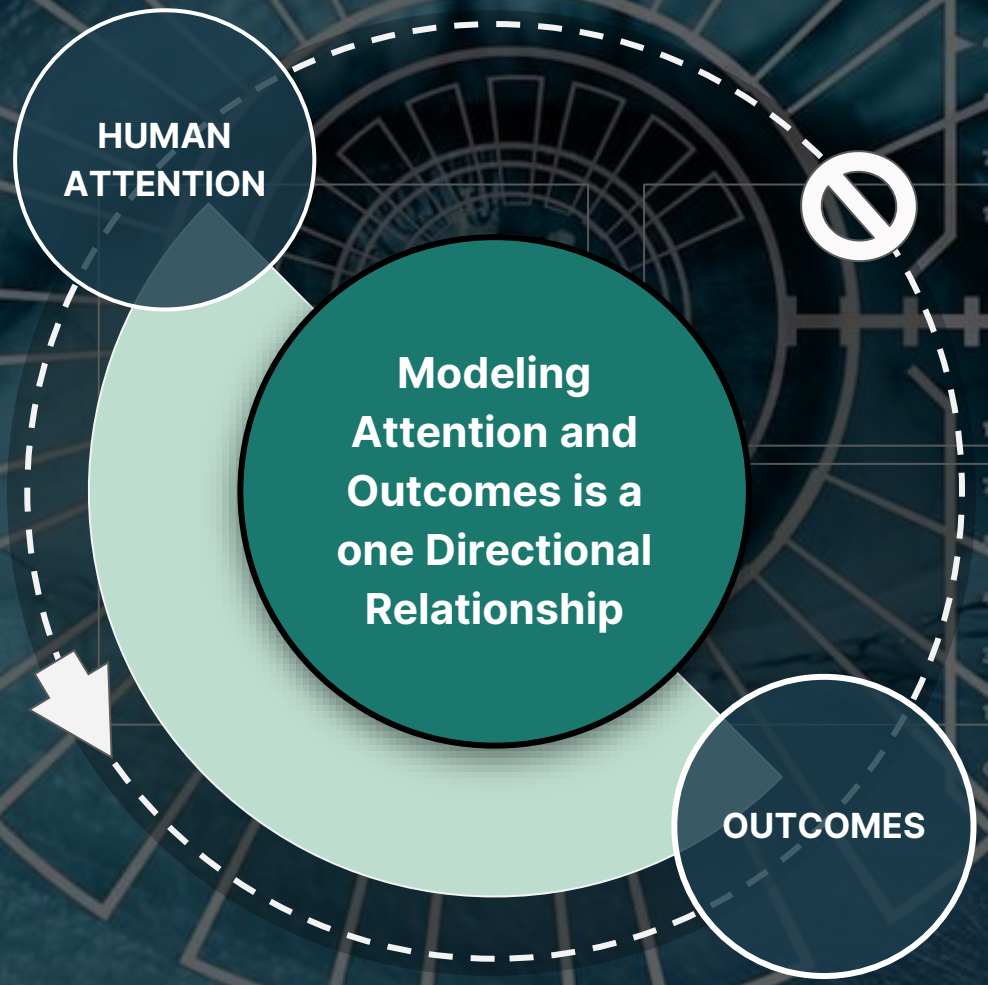
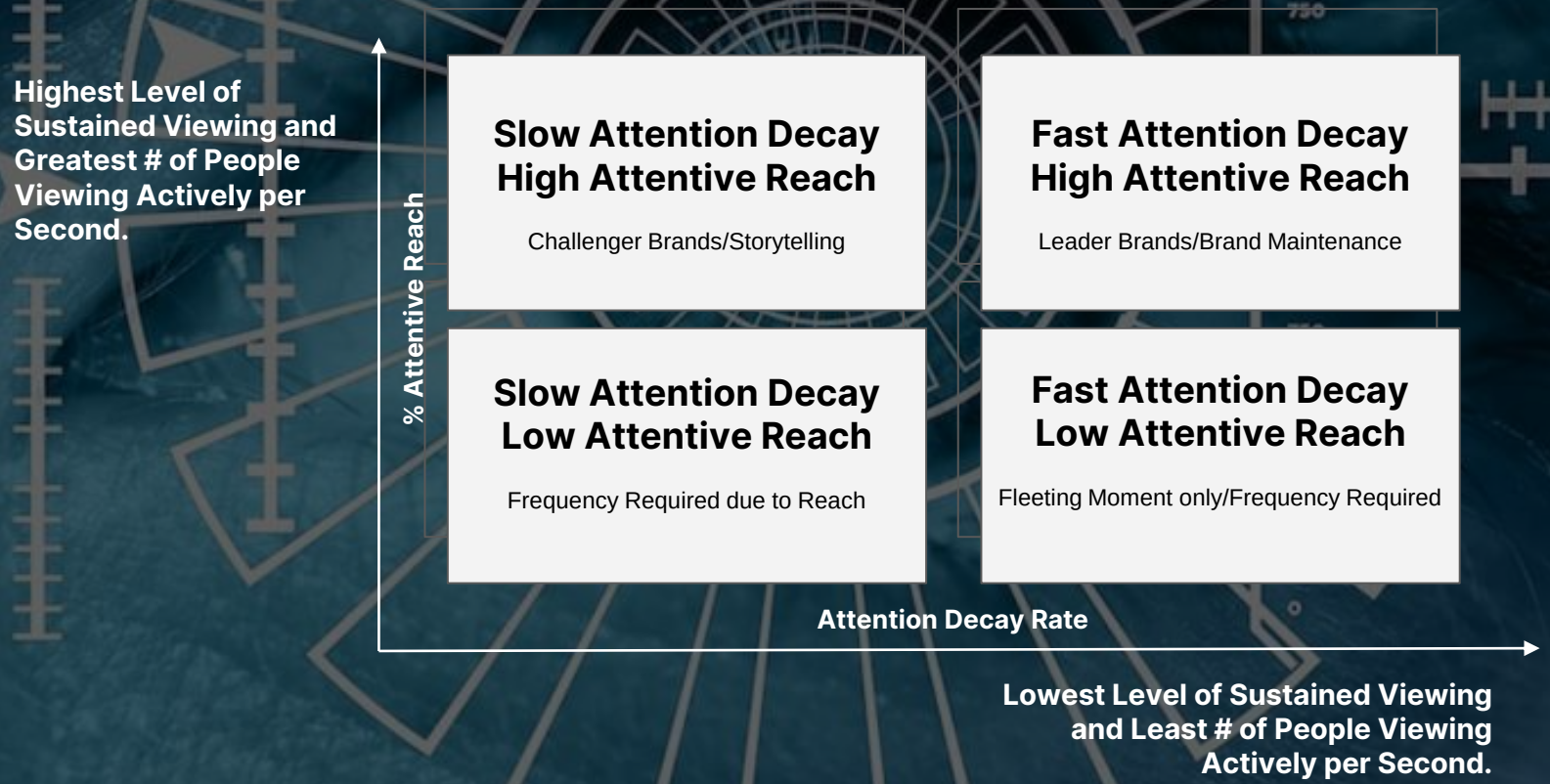
A human first approach for accuracy, depth and scale.

Implication #2: Outcomes cannot predict attention accurately, because they are so heavily influenced by nuance.



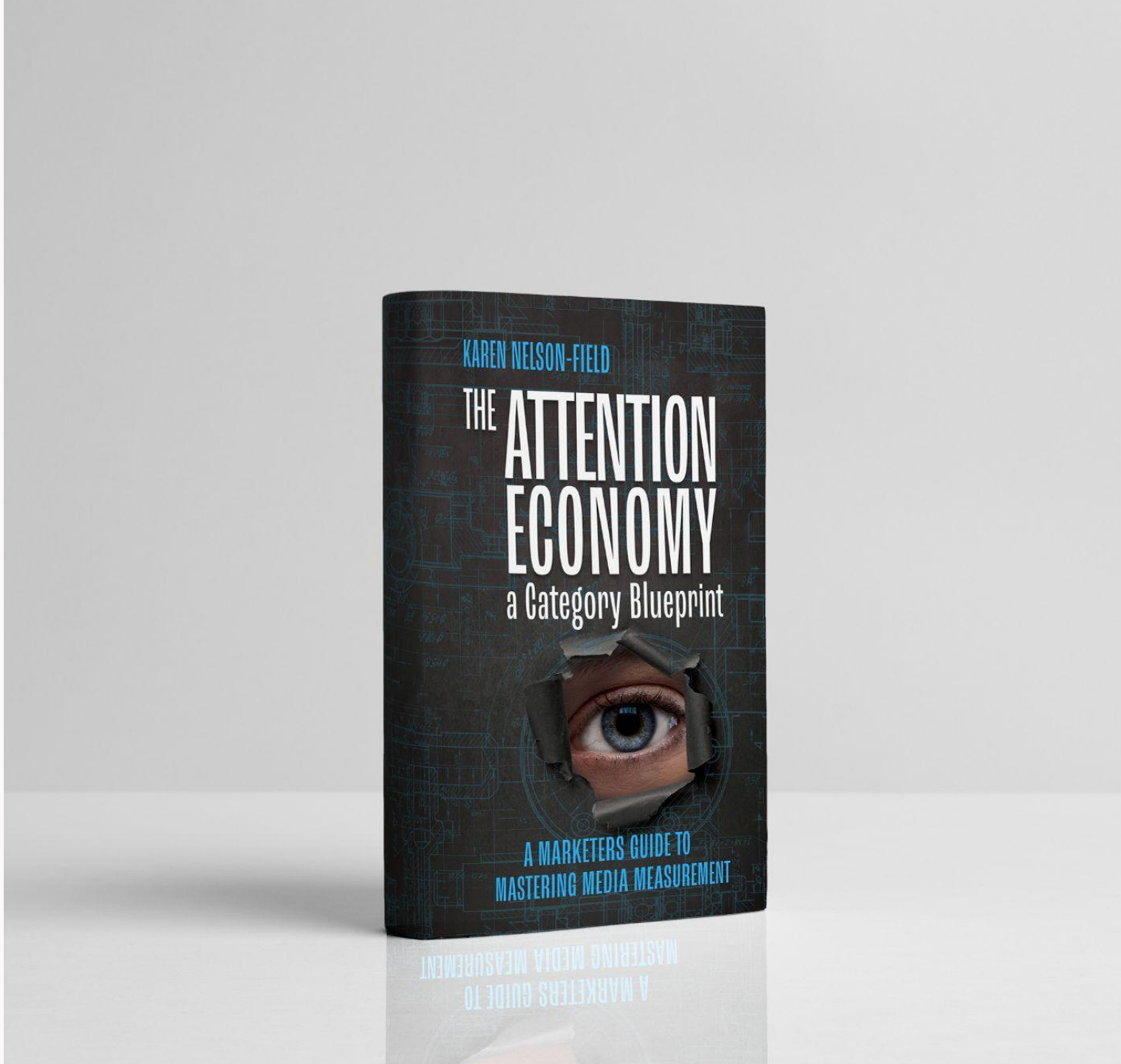
Implication #3: Attention strategies should be tailored to campaign requirements (not simply high/low quality or more/less time).



THE ATTENTION ECONOMY

A Category Blueprint

Forthcoming. June 2024



Thankyou

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