



Online Publishers
Association

Biometric Evaluation: Assessing the Effectiveness of the OPA Ad Unit

November 2, 2010

Conducted in partnership with

innerscope®
research



Presentation Overview

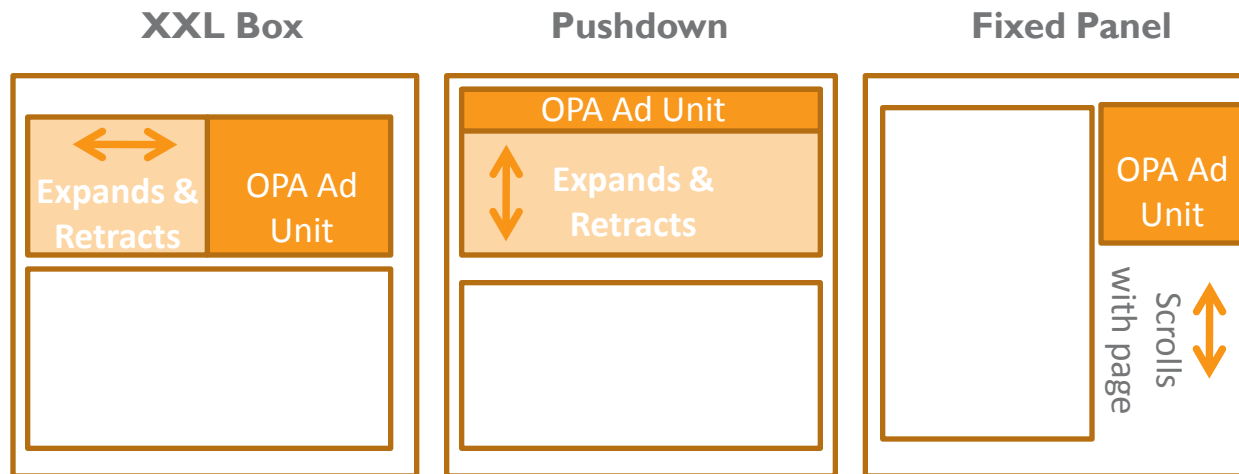
1. Study Background & Measuring Emotion
2. Study Overview
3. Study Results



Study Background & Measuring Emotion

Background | Study Objectives

- Understand impact of OPA Ad Units (e.g. XXL, Pushdown and Fixed Panel) by measuring engagement and emotional response
- Go beyond traditional research methods to measure emotional engagement by deploying biometric monitoring and eye tracking

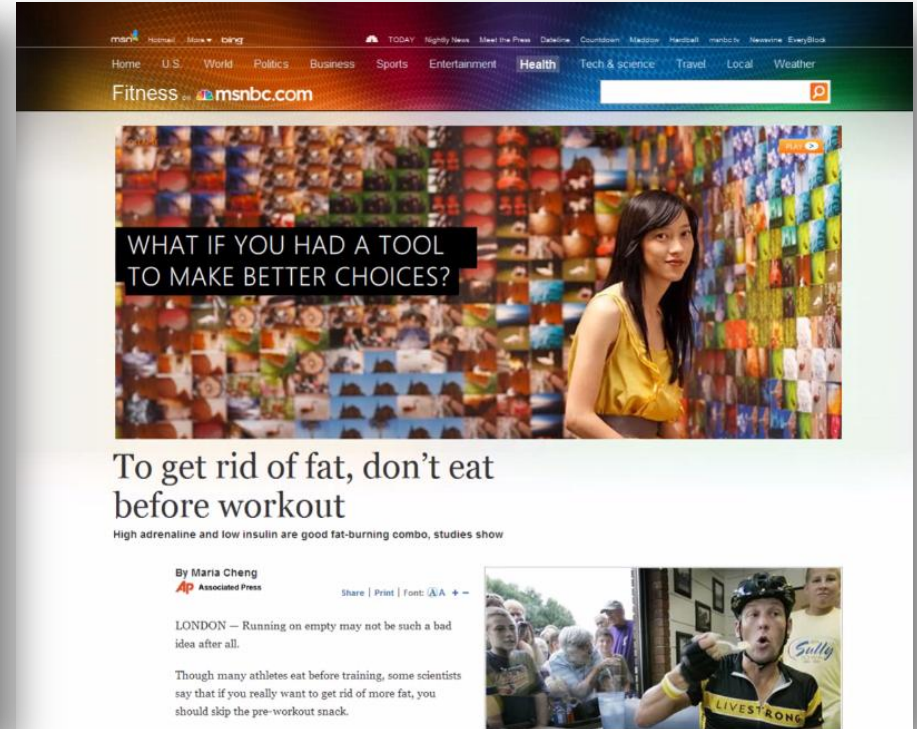


*see next slides for examples

Background | Sample Push Down



The screenshot shows a Bing search result for the article "To get rid of fat, don't eat before workout" by Maria Cheng. The article is from Associated Press and is dated July 27, 2006. The main headline is "To get rid of fat, don't eat before workout" and the sub-headline is "High adrenaline and low insulin are good fat-burning combo, studies show". The article text discusses the benefits of running on an empty stomach for fat burning, citing studies that show cyclists who trained without eating burned significantly more fat than their counterparts who ate. It also mentions Lance Armstrong eating a piece of coconut cream pie before a seven-day bike ride across Iowa in 2006. The article is accompanied by a photo of Lance Armstrong eating a slice of pie.



The screenshot shows an MSNBC article titled "WHAT IF YOU HAD A TOOL TO MAKE BETTER CHOICES?". The article is by Maria Cheng and is from Associated Press. The main headline is "WHAT IF YOU HAD A TOOL TO MAKE BETTER CHOICES?" and the sub-headline is "To get rid of fat, don't eat before workout". The article text is identical to the one in the first screenshot. The article is accompanied by a video player showing a woman in a yellow top standing in front of a wall of many small photos. Below the video player is a photo of Lance Armstrong eating a slice of pie.

Click [here](#) to view video

Background | Sample XXL

Facing for Cuts, Military Firms Shed Workers
Tightened spending at the Pentagon is unsettling the defense industry, with Lockheed Martin announcing Wednesday that one quarter of its executives had applied for layoffs at the company's own costs.

What's Popular Now

- 1. **Intel's 'Core' i5 processor** arrives on... with email, video chat, web surfing, online banking, and streaming and downloading photos and videos.
- 2. **Do you support your PC with an Intel 'Core' i5 processor?**
- 3. **Intel's 'Core' i5 processor** arrives on...
- 4. **Intel's 'Core' i5 processor** arrives on...
- 5. **Intel's 'Core' i5 processor** arrives on...

Most Popular

- 1. **Intel's 'Core' i5 processor** arrives on...
- 2. **Do you support your PC with an Intel 'Core' i5 processor?**
- 3. **Intel's 'Core' i5 processor** arrives on...
- 4. **Intel's 'Core' i5 processor** arrives on...
- 5. **Intel's 'Core' i5 processor** arrives on...

Intel

PROCESSORS IN ACTION

See, hear and experience what the 2010 Intel® Core™ processors can do for you.

Look for the Intel® Core™ i5 processor in a variety of PCs, laptops, tablets, and smartphones.

What's Popular Now

- 1. **Intel's 'Core' i5 processor** arrives on...
- 2. **Do you support your PC with an Intel 'Core' i5 processor?**
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- 5. **Intel's 'Core' i5 processor** arrives on...

Sample Only

Sample Only



Background | Benefits of Biometric Research

- Biometric and eye tracking techniques provide a better understanding of how the end user engages with online advertising by evaluating:
 - Whether or not people look at advertising while it appears in the browser window
 - The amount of visual fixation on the ad
 - The amount of emotional impact with the ad
- Data is collected passively while participants naturally engage with the content.



Passive Monitoring during Super Bowl



Passive Monitoring during Website Surfing

Background | Innerscope Methodology

Participants wear the **Innerscope Biometric Monitoring System™** which has advanced sensors that measure moment-to-moment changes in biologic indicators of emotion including:

- 1) Skin sweat
- 2) Heart rate
- 3) Breathing
- 4) Motion



Biometric signals are integrated with data obtained from the **eye trackers**, which measure:

- 1) Visual attention to screen
- 2) Visual attention to brand and text





Background | Industry Validation - ARF Review

Innerscope is the only neuroscience-based firm validated by a third party

“Combines well-developed, biological-psychological concepts and theories with both scientifically-validated tools and creative approaches to research problems.”

“Provides results that are reliable and valid, helping clients to make proper advertising and marketing decisions.”

“Possesses tools and methods that can be used for any communication element, including hard-to-measure areas such as product placement, ads in video games and social media.”

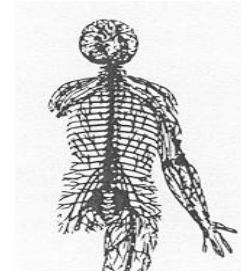


Background | Measuring Emotional Responses

- While **emotional responses** initially occur unconsciously in the **brain**, we experience **emotions** in our **bodies**.



Emotion System



Unconscious Peripheral Brain



“My skin crawls with fear.”



“His heart leaps with joy.”



“Her beauty took his breath away.”



“It moved me.”

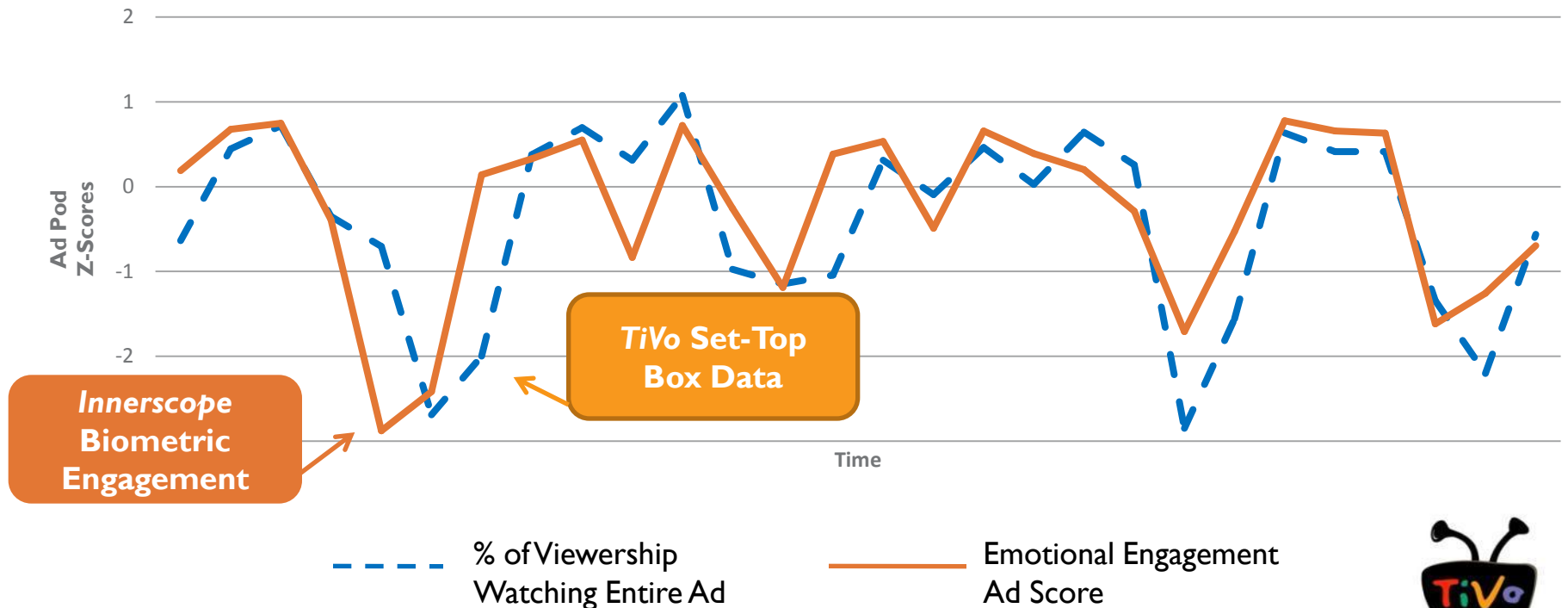


Emotions efficiently tell us
which bits of information to **engage...**
and which to **ignore**

and only the **messages** that
engage can **change perceptions**
and **drive behavior**

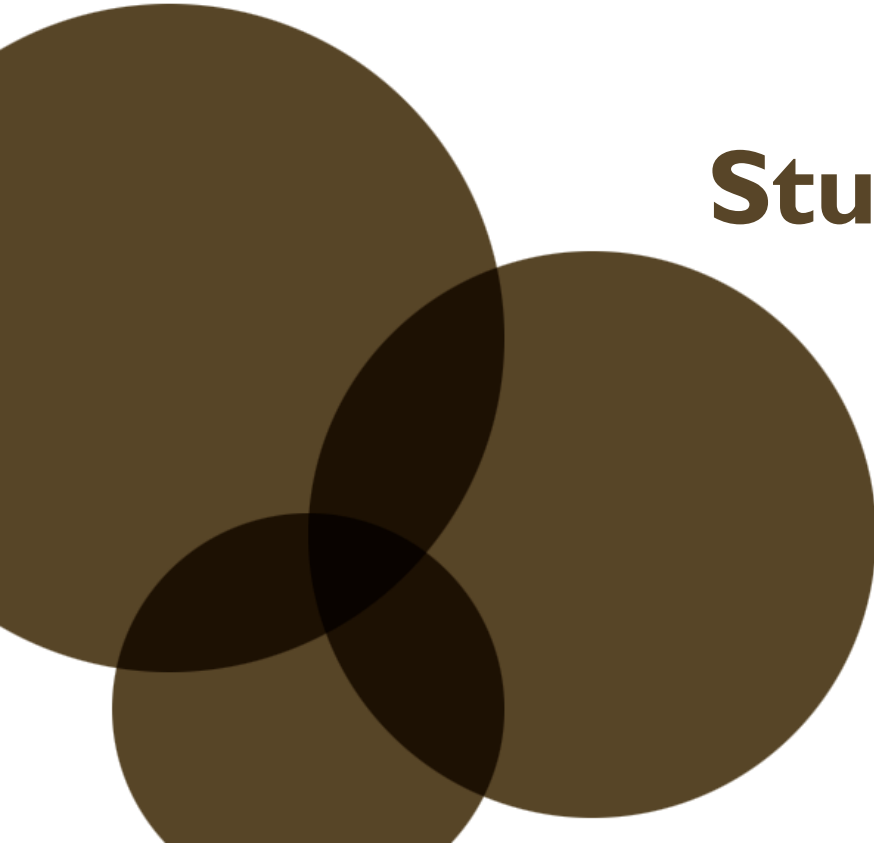
Background | Predicted Behavior - Fast Forwarding

Emotional responses of **40 Innerscope participants** correlates with viewing behavior of a *TiVo* panel of **100,000 viewers**





Study Overview





Overview | Study Design

- **Study Goal:** The goal of this study is use *Innerscope's* biometric and eye tracking methodologies to evaluate the impact of the OPA Ad Units to demonstrate their effectiveness in creating emotional engagement and visual attention.
- **Population:** N=100
 - Males and Females
 - Ages 18 – 54
 - House Hold Income of \$50,000 or more
 - Behavior:
 - Visit websites for news content 4 days or more a week
 - Must visit 2 out of 3 of the following websites and be non-avoiders of the 3rd: CNN.com, MSNBC.com & NYTIMES.com
- **Location:** Innerscope Media Lab in Boston, MA

Overview | Study Details (continued)

- **Websites:** Three (3) target news websites
 - CNN.com, MSNBC.com & NYTIMES.com



- **Target OPA Ad Units:** Three (3) examples of each OPA Ad Unit (total of 9 different OPA Ad Units)
 - Bing, Cleveland Clinic, Cadillac, Mercedes, Unilever, Westin, (+3 to remain unidentified)



Overview | Methodology

Task: Visit all 3 target websites and select from links to specific articles...



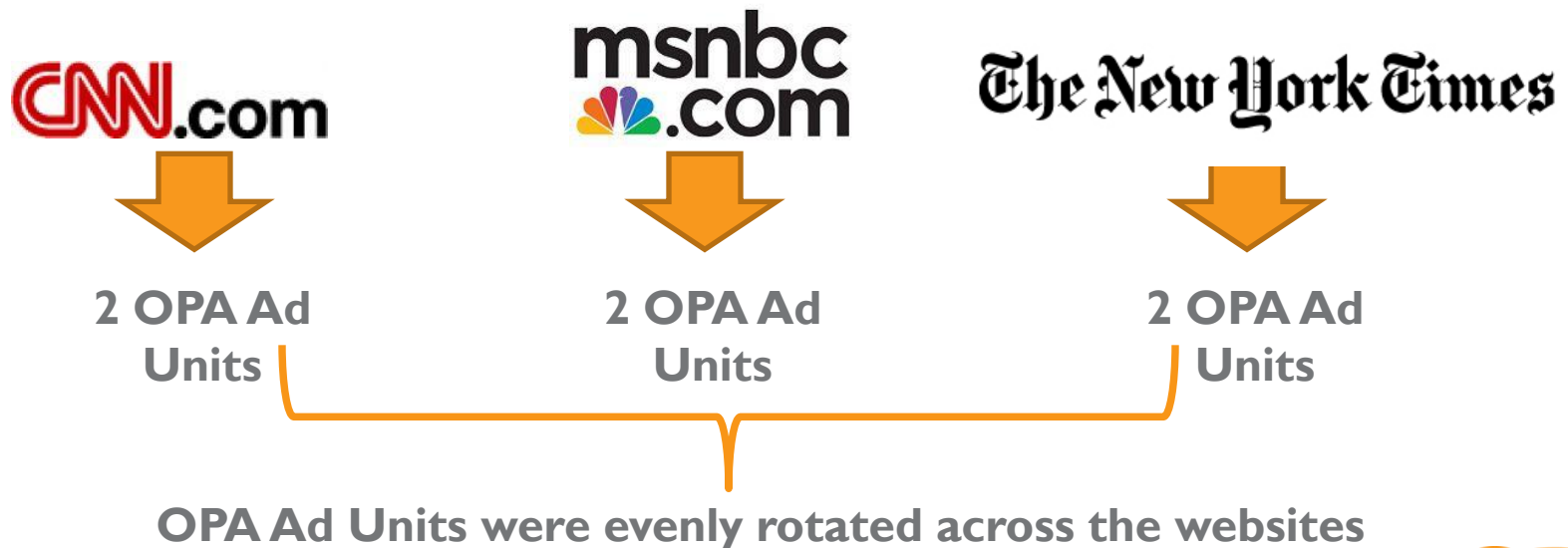
Free Surf for Natural Experience



- All participants were asked to visit all 3 websites during the last week of August 2010.
- While on the homepage of each website, they were asked to select from a group of articles to read.
- The OPA Ad Units appeared on these article pages, which featured evergreen content.
- Once a participant surfed away from a target article, they could freely browse the rest of the target website and click on other articles and links.

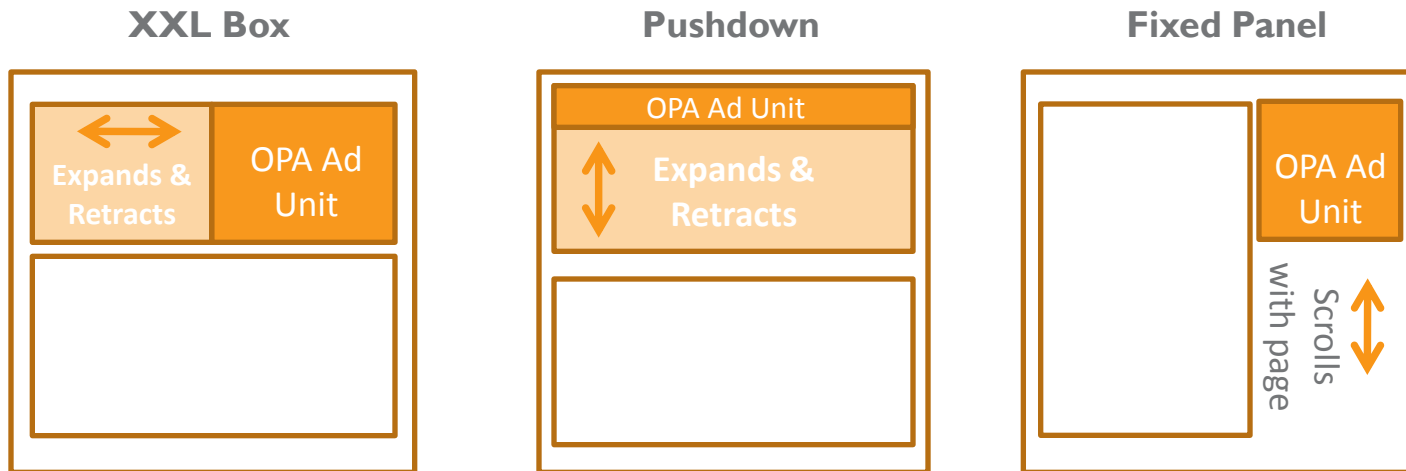
Overview | Methodology (continued)

- Each participant saw a total of 6 OPA Ad Units during the experience (2 per website). The data is compiled from these 600 biometric exposures.
- The 9 OPA Ad Units were evenly rotated across the websites and paired with 1 of 3 different articles. The study included 27 combinations of OPA Ad Units paired with content.



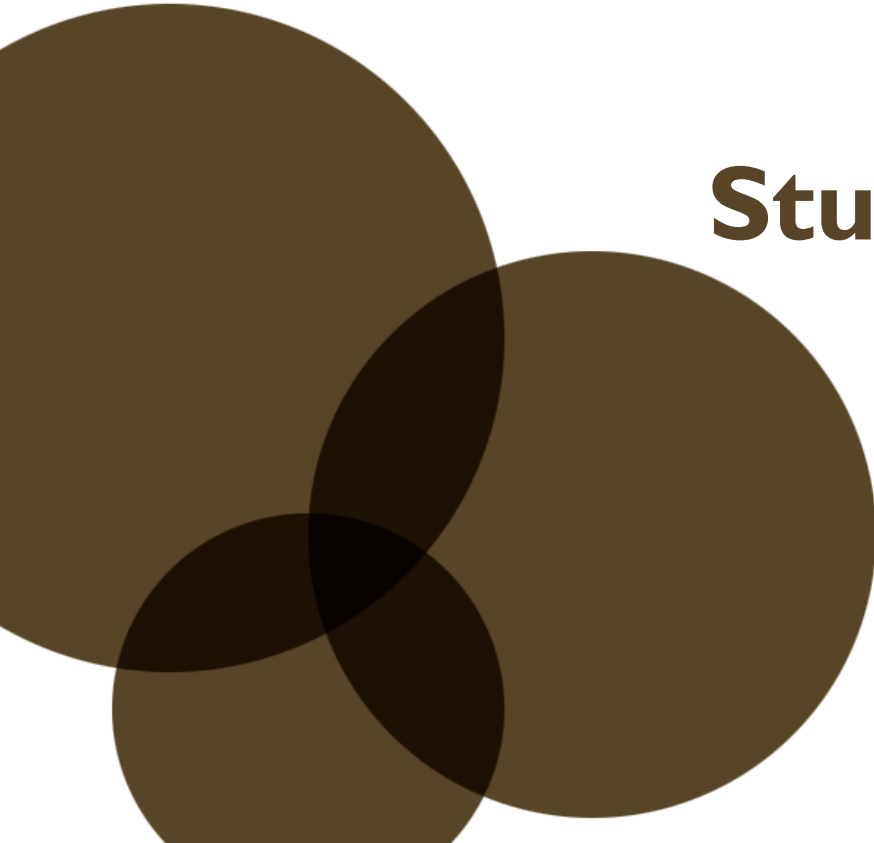
Overview | Analysis

- In most cases, this animation (of expanding across content or pushing content down) occurs within the first 10 seconds of the webpage loading.
- Therefore, the analysis evaluated the overall effectiveness of the OPA Ad Units during the first 10 seconds of participants surfing a webpage containing the OPA Ad Units as well as after the first 10 seconds





Study Results





Study Results

Online Advertising Questions

1. Will people notice my ad?
2. How quickly will people notice my ad? (Are consumers likely to visit a content page and click away before noticing my ad?)
3. Do consumers spend time processing my ad, or does it simply grab their attention initially and then they look away and never look back?
4. How many times do people fixate on my ad?

OPA Ad Unit Answers

1. 96% of participants pay attention to OPA Ad Units during a natural online surfing experience.
2. 90% of participants notice the OPA Ad Units within the first 10 seconds of being on the webpage and on average, it takes 0.6 of a second to notice the OPA Ad Units.
3. 67% of participants not only notice the OPA Ad Units during the first 10 seconds, but they go back to look at the ad after the first 10 seconds of being on the webpage.
4. On average, participants fixated over 15 times on OPA Ad Units.



Study Results (continued)

Online Advertising Questions

5. Does my ad generate an emotional response?
6. Are these favorable responses?

OPA Ad Unit Answers

5. During the first 10 seconds, OPA Ad Units emotionally resonated with surfers at the same level as all other elements on the web page including the content. Surfers who look at the OPA Ad Units after the first 10 seconds (**73% of participants**) generated **stronger emotional response to the OPA Ad Units than to the rest of the web page.**
6. People rated the OPA Ad Units favorably (with an average likeability rating of 6.3 out of 9).

Study Results

Online Advertising Question

Will people notice my ad?

OPA Ad Unit Answer

- 96% of participants pay attention to OPA Ad Units

Visual Fixation

A pause in eye movement long enough to process a piece of information and decide where to look next



Innerscope uses sophisticated eye tracking technology to measure visual fixation



Online Advertising Questions

How quickly will people notice my ad? *(Are consumers likely to visit a content page and click away before getting a chance to notice my ad?)*

OPA Ad Unit Answers

- 90% of participants pay attention to OPA Ad Units during the first 10 seconds they appear on screen.
- It took just 0.6 seconds for the typical reader to fixate on the OPA Ad Units.
- Within the first 10 seconds of the page loading, participants spent 1/3 of their time fixated on the OPA Ad Unit.

Study Results | Sample Gaze Plot

- The Gaze Plot to the right shows the order of visual fixations for one participant in the study during the first second on the webpage .
- The OPA Ad Unit is capturing visual attention immediately.



Gaze Plot for a Participant | First Second on Page



Online Advertising Question

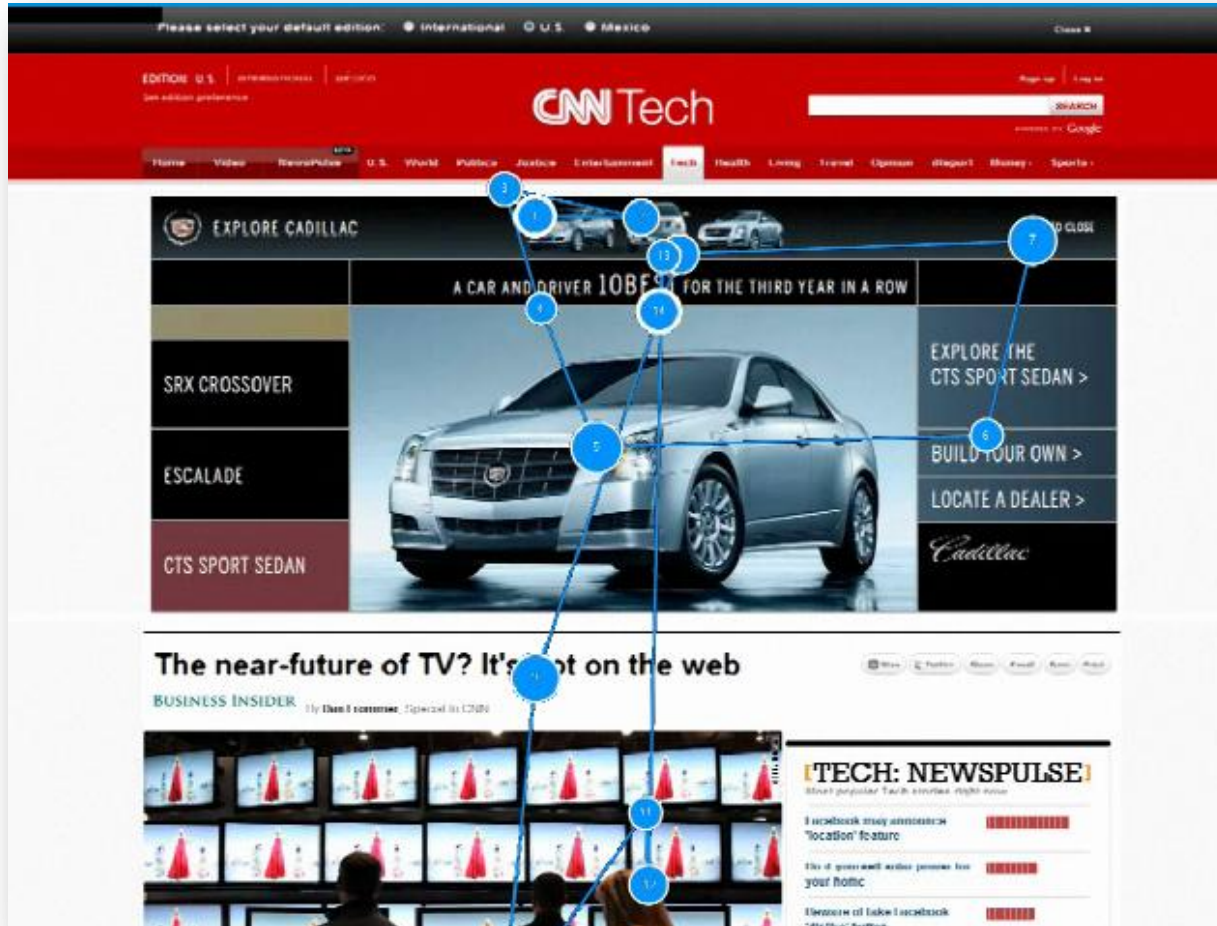
Do consumers spend time looking at the ad?

OPA Ad Unit Answers

- ❑ On average, participants fixated over 15 times on OPA Ad Units.
- ❑ 40% of total fixations occurred after the first ten seconds.
- ❑ 67% of participants not only notice the OPA Ad Units during the first 10 seconds but they go back and look at it again after the first 10 seconds
- ❑ This means that the OPA Ad Units have built enough interest to generate significant follow-up processing.

Study Results | Sample Gaze Track Video

- The typical website visitor fixates 15 times on the average OPA unit.



Study Results

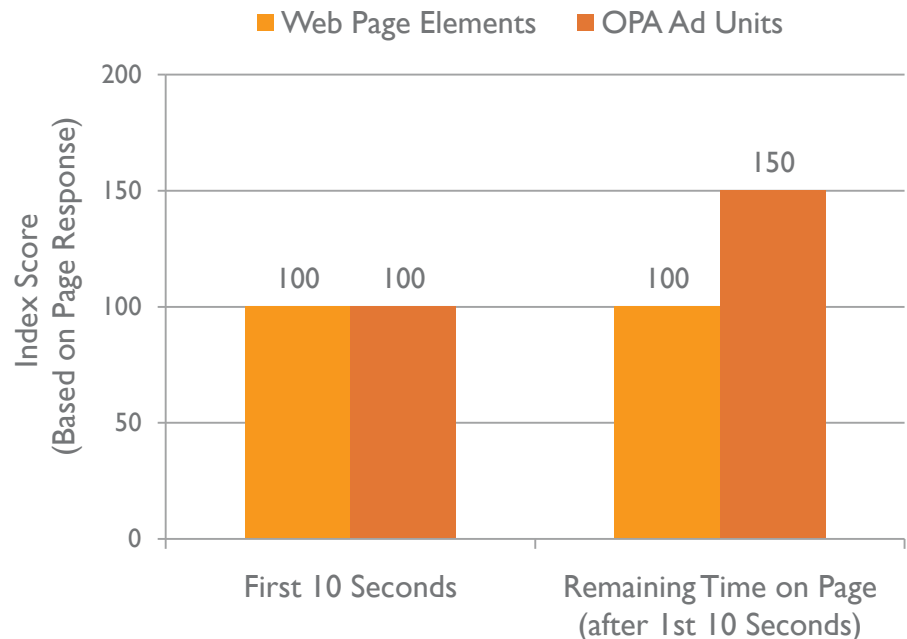
Online Advertising Question

Are the ads generating an emotional response?

OPA Ad Unit Answers

- During the first 10 seconds, OPA Ad Units emotionally resonated with surfers at the **same level** as the other elements on the web page.
- Surfers who look at the OPA Ad Units after the first 10 seconds (**73% of participants**) generated **stronger emotional response to the OPA Ad Units than to the rest of the web page.**

Emotional Resonance



*Data compiled from 600 biometric exposures

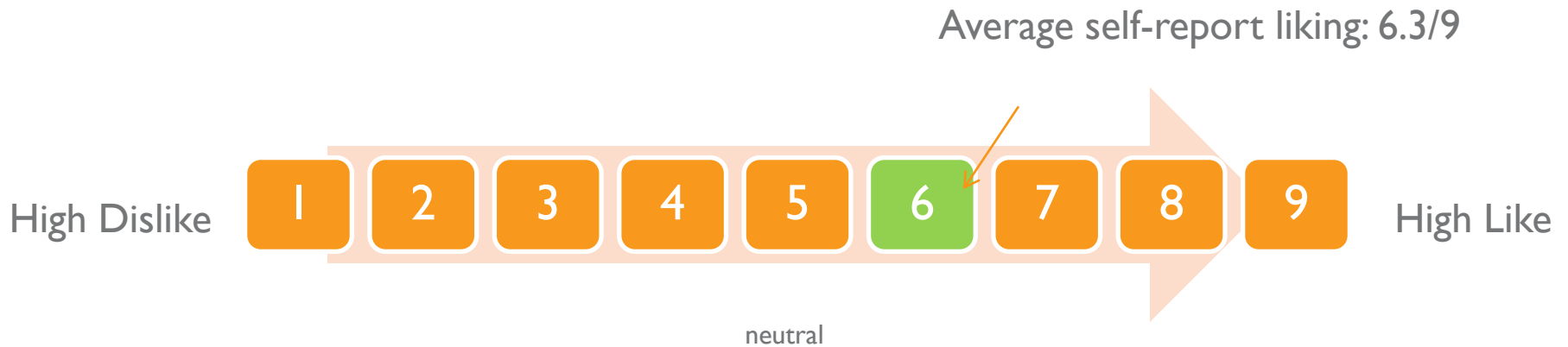
Study Results

Online Advertising Questions

Are these favorable responses?

OPA Ad Unit Answers

- On average people rated the OPA Ad Units in this study favorable.



*Data is compiled from 900 self-report OPA Ad Unit exposures



Innerscope's AQ™ Scores

- **IQ** is a score derived from one of several different standardized tests designed to assess a person's intelligence
- **EQ** is a score that refers to a person's Emotional Intelligence, or the ability to perceive, control, and evaluate emotions
- **AQ™** is a score unique to Innerscope Research that assesses the ability of a stimulus to resonate with a target audience and build affinity. This score is derived from two independent factors: unconscious, emotional resonance & conscious judgment.

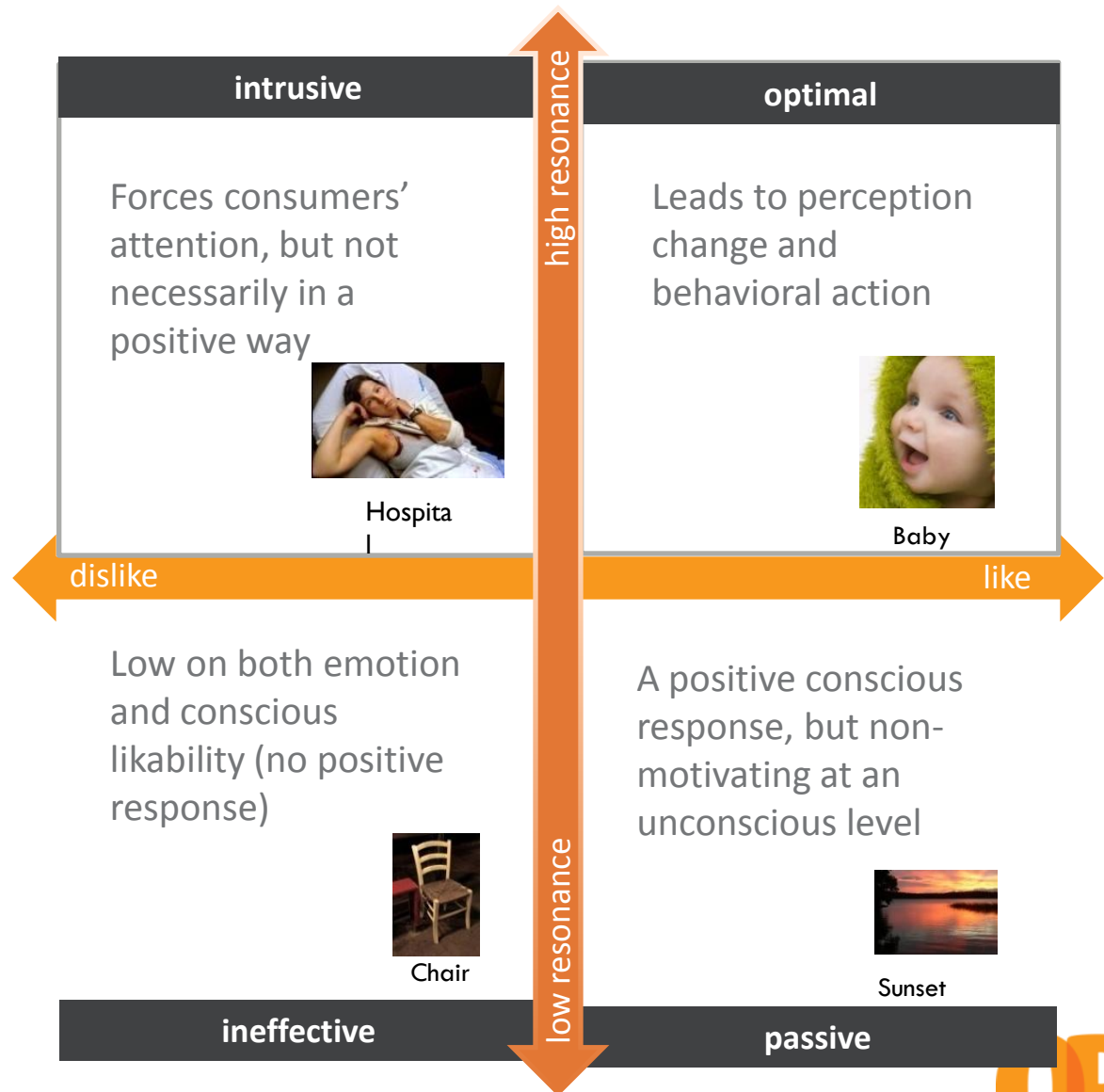
AQ™ Approach to Measuring Emotional Response

- **Self-report** is used to measure conscious judgment. These scores are plotted on the x-axis of the AQ™ Map to inform “which direction the wind is blowing”
- **Biometrics** are considered the gold standard to measure emotional resonance. These scores are plotted on the y-axis of the AQ™ Map to inform “how strong the wind is blowing”



Study Results | Overview of Innerscope AQ™ Map

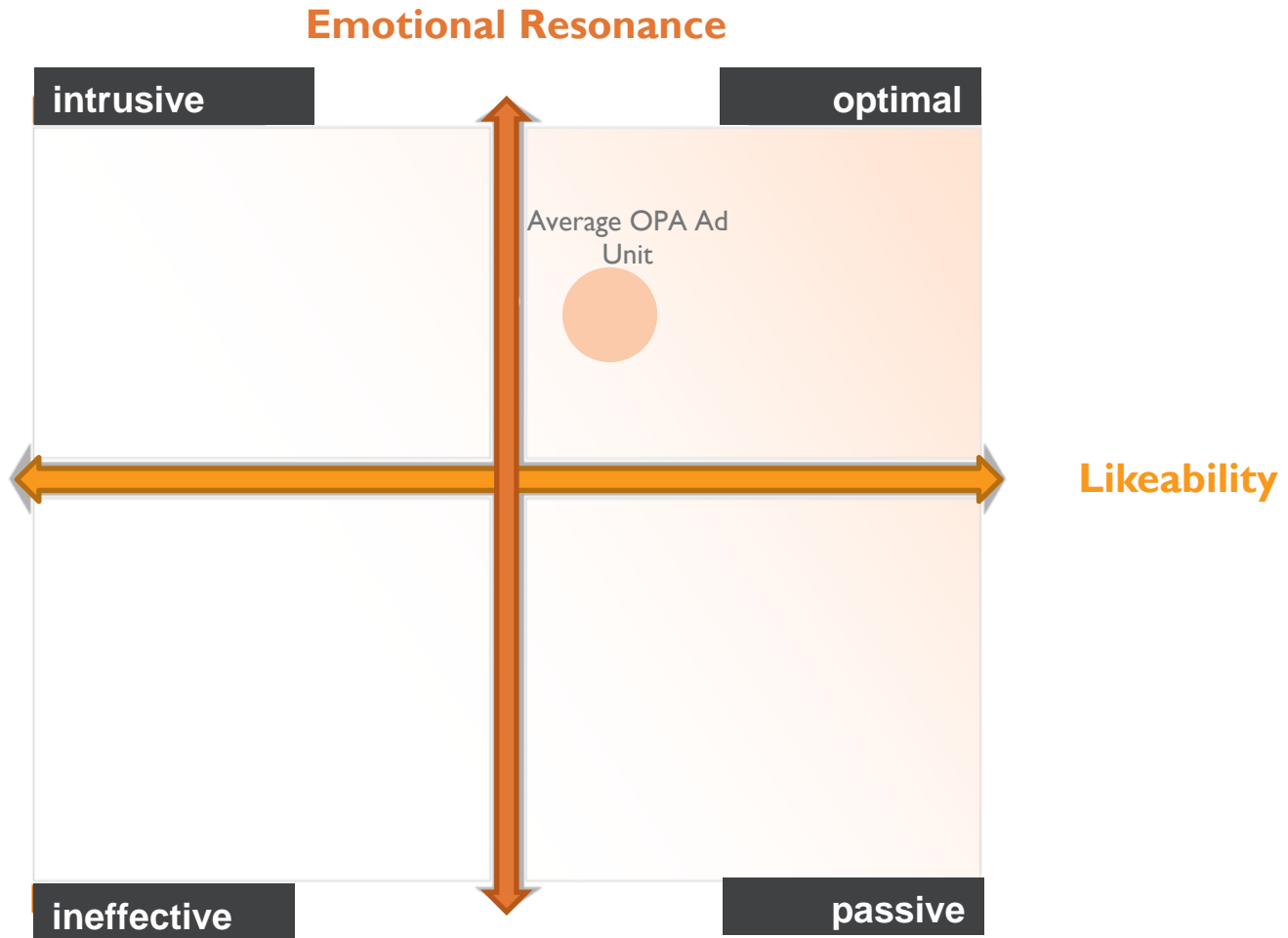
- The AQ™ Map to the right plots all target stimuli according to likability (on the x-axis) and emotional resonance (on the y-axis).





Study Results | AQ™ Map for Average OPA Unit

Visual Attention + Emotional Resonance + Likeability



Size of Circle indicates Visual Attention
(The larger the circle, the greater visual attention)





Summary

- The OPA Ad Units are extremely effective at capturing visual attention.
- OPA Ad Units capture visual attention immediately and repeatedly. Eye tracking data indicates:
 - 96% of participants pay attention to OPA Ad Units.
 - The majority of people browsing a web page with an OPA Ad Unit fixate on that unit within less than a second.:
 - 90% of participants notice the OPA Ad Units within the first 10 seconds of being on the webpage. On average, it takes 0.6 of a second to notice the OPA Ad Units.
 - The OPA Ad Units build enough interest to generate significant follow-up processing. People don't simply notice the OPA Ad Units once and then look away, they fixate on the OPA Ad Units repeatedly:
 - 67% of participants not only notice the OPA Ad Units during the first 10 seconds, but they go back to look at the ad after the first 10 seconds of being on the webpage. On average, people fixate on the OPA Ad Units over 15 times.



Summary

- The OPA Ad Units are extremely effective at generating emotional response.
- The units generate higher unconscious emotional response than all the content on the webpage.
 - During the first 10 seconds, OPA Ad Units emotionally resonated with surfers at the **same level** as the other elements on the web page.
 - Surfers who look at the OPA Ad Units after the first 10 seconds (**73% of participants**) generated **stronger emotional response to the OPA Ad Units than to the rest of the web page.**
- The average likeability rating of OPA Ad Units is 6.3 out of 9
- The positioning within the Optimal Quadrant on the AQ™ Map indicates:
 - People consciously judge the OPA Ad Units favorably
 - The OPA Ad Units are likely to lead to perception change and behavioral action.



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