

Evaluating the Performance and Future of Emotion AI

THE QUIRK'S EVENT



Speaker:

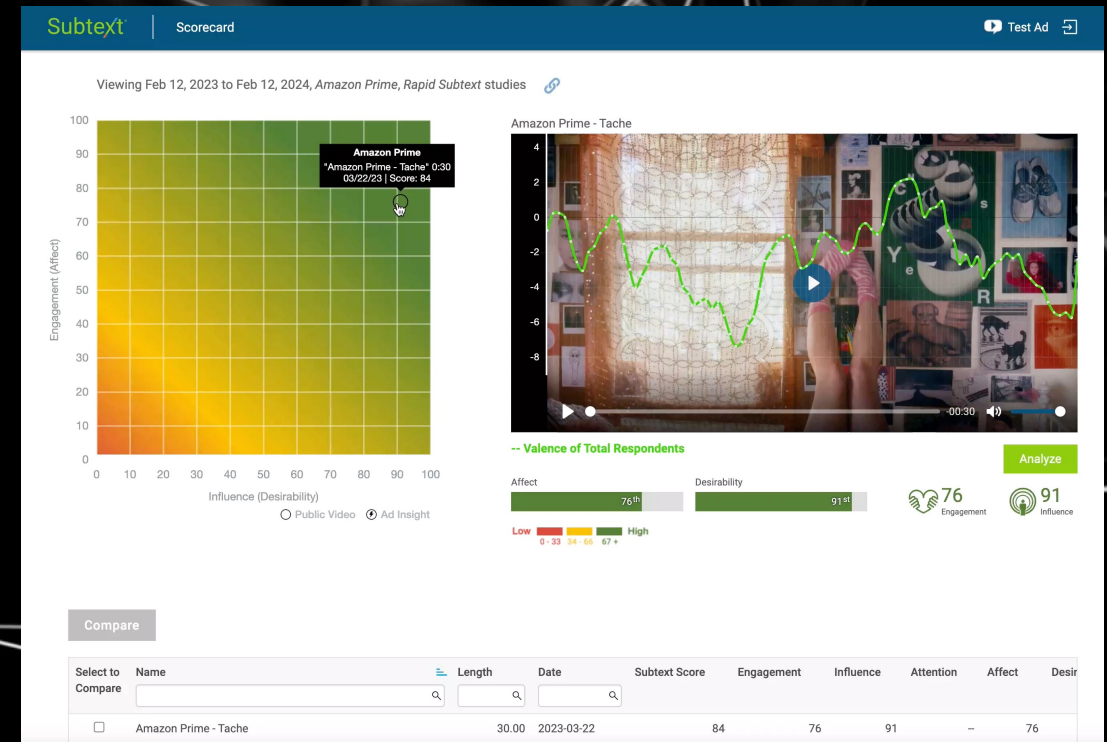
Dr. Aaron Reid

Ph.D. Founder and CEO

Sentient Decision Science



Sentient Labs developed Sentient Insights, the premier Episodic Ad platform. Sentient Insights combines state-of-the-art real-time detection of emotional responses to media with scientific insights from media implicit measurement technology and the most comprehensive suite of advanced behavioral measures available, to provide actionable insight and the most reliable predictive modeling of behavioral outcomes in the industry.





Automated Behavioral Science Technology

Let's take a deeper look.



Sentient Expression is a deep learning Emotion AI technology that quantifies the human emotional experience.

Sentient Expression leverages respondents' webcams, making it a globally scaled, efficient measure for investigating natural responses to your media under real-world conditions.

- Capture moment by moment expression of emotions like happiness, sadness, disgust, fear, & surprise
- Filter how engaged your key segments are, and where you're losing them
- Reveal positive and negative emotional responses, overall emotional engagement and valence
- More accurate detection of emotions with validation by multiple Emotion AIs



Sentient Prime is a scientifically valid and patented implicit association technology used to reveal the subconscious associations which influence behavior.

- Measure Emotional Appeal to reveal preference and purchase intent
- Uncover Self-ID to measure the consumer's sense of self and overall brand loyalty
- Discrete Association results provide the equities and attributes that are true, ownable or valuable
- Reveal what was encoded in memory
- Reliable correlations to bio-metrics and works on any device!



The Sentient Eye platform deploys AI-powered eye tracking technology at scale, integrated with Sentient Expression to deliver a complete picture of real-time audience response to media.

- Measure attention to static or dynamic media
- Document comprehension of advertising narratives
- Identify visual storytelling design elements that are effective or ineffective at focusing audience attention on your narrative

Subtext[®]

EMOTIONAL INTELLIGENCE FOR ADVERTISERS

Pinpoint the Moments That Change Attitudes with Subtext Emotion AI

 SENTIENT INSIGHTS[®]



Subtext is based on a fundamental model of psychological persuasion.



ENGAGEMENT

Content won't be successful unless it makes it past our eyes and ears to begin with.



ATTENTION
IT HAS TO
BE NOTICED



AFFECT
IT HAS TO
CONNECT



INFLUENCE

Everyone wants their content to be "liked", but persuasion pays the bills.



MEMORY
IT HAS TO BE
REMEMBERED



DESIRE
IT HAS TO LIFT
PREFERENCE

The best behavioral science methods are then attached to each pillar of that model and scaled for global measurement.

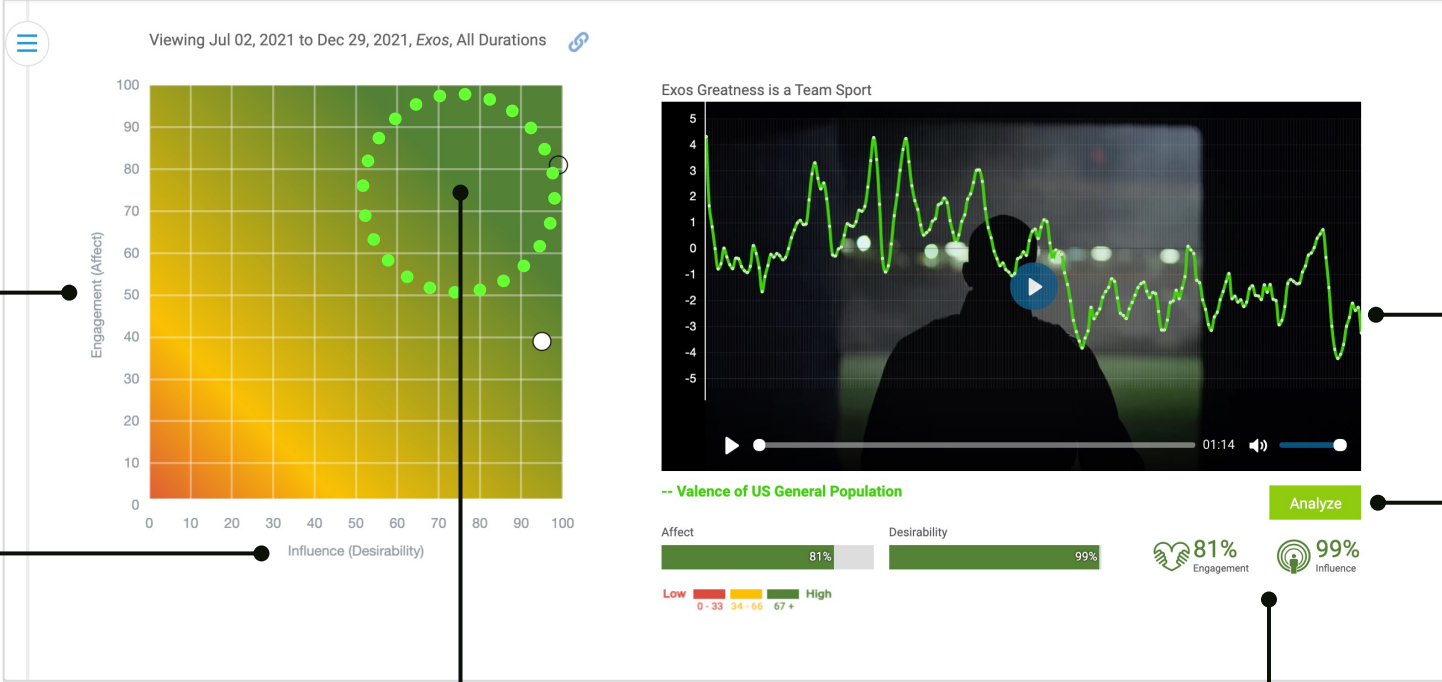
Performance results are visualized within the Subtext Scorecard and optimization diagnostics within the online Analysis Tool.

Engagement

The degree of emotion (Affect) expressed by the audience moment by moment during ad exposure. Greater degrees of emotion, positive or negative, equate to higher scores (0-100 normative scale).

Influence

Evaluates ad performance according to its ability to drive System 1 implicit emotional brand appeal, influencing the audience positively toward the brand.



Valence (emotional journey) shows highs and lows of emotions expressed by participants second by second.

Link to Analysis Tool provides additional measures.

Subtext® Scorecard. Media in the High Engagement & High Influence area are the best in the marketplace. These ads breakthrough, captivate, maintain attention and improve demand for the brand.

Engagement and Influence summary.

Subtext is applied at all stages of creative development.

Subtext[®]

Creative Ideas



Storyboards



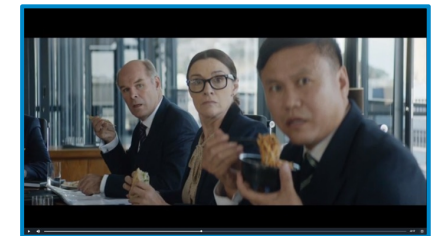
Animatics



Rough Edits



Final Cuts



Enabling consumer insight at each of these creative development steps empowers us to shape campaigns according to fundamental human motivation insights. This results in more emotional advertising and breakthrough creative campaigns.

Subtext[®]

Sentient's ad testing product Subtext combines Automated Behavioral Science with Emotion AI to validate performance across all stages of creative development

TVCs



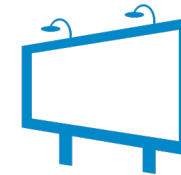
Social



Static Digital/Print



Outdoor



Audio





Emotion AI

Examining the performance.

Maximize Volume Response & Efficiency: Third Party Validation Case Study

Objective

A global alcoholic beverage company wanted to validate Sentient’s automated behavioral science measure's ability to predict in-market advertising performance.

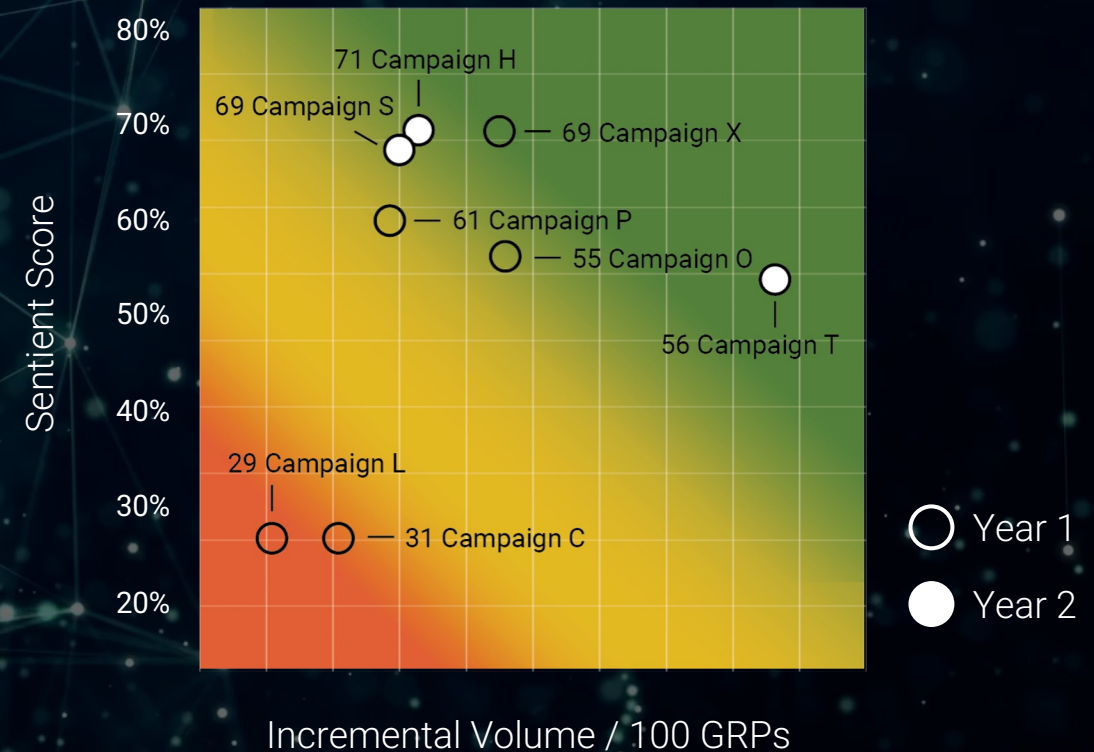
Solution

The customer conducted an independent analysis examining the relationship of of Sentient’s combined System 1 & System 2 behavioral science measures known as the “Influence Score” to GRP (Gross Rating Point) performance on campaigns tested by Sentient over two years.

Results

The learning was to prioritize creative with high Influence scores to maximize volume response and efficiency. Sentient's automated behavioral science measures demonstrated a robust ability to forecast in-market performance. Correlating to how often someone must see the ad before they can recall it and how many ad exposures does it take before the desired outcome occurs.

Influence Correlation to GRP Over 2 Years



Source: Customer third party research company applying Sentient’s neuroscience capabilities to GRP performance over two years (2021).

Optimizing Creativity: Emotion AI Cut Downs Case Study

Objective

A global alcoholic beverage company sought to enhance the effectiveness of its advertising for a new campaign. Initial testing revealed subpar performance in the :15 version, prompting a need to diagnose issues and refine the creative accordingly.

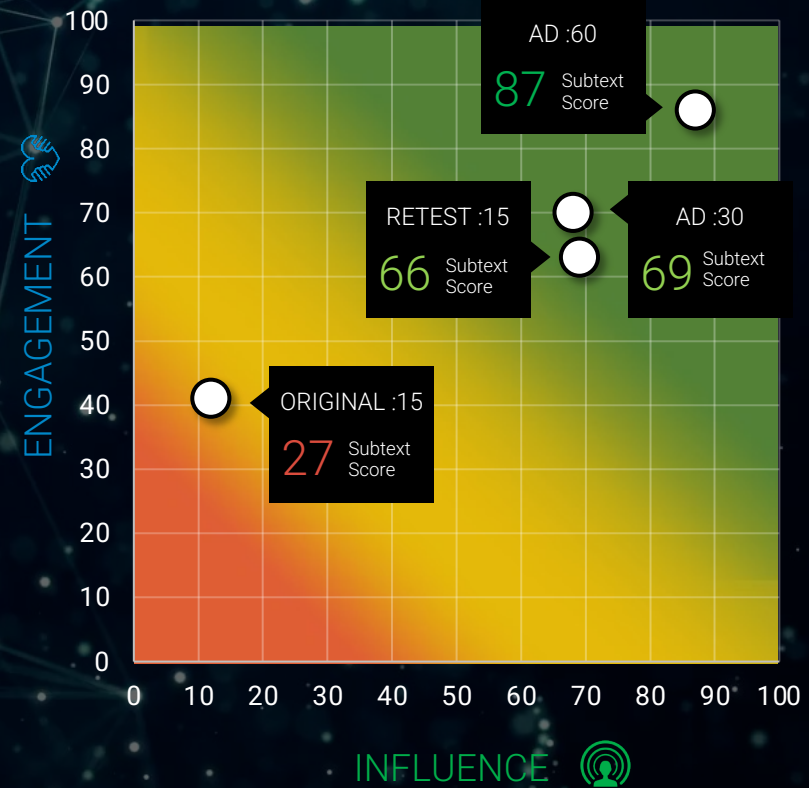
Solution

Sentient's Subtext product was utilized to conduct System 1 and System 2 testing, gathering comprehensive diagnostics to analyze audience engagement and influence more thoroughly.

Results

In this a retest of a :15 ad, the brand effectively addressed issues from the original cutdown, restoring narrative clarity akin to longer versions. Confidence in placement stemmed from high scores, culminating in an esteemed Cannes Lions award. Utilizing Subtext consistently demonstrated alignment with optimization diagnostics, resulting in year-over-year improvements in creative performance.

Creative Retest Results



Source: Applying Sentient's neuroscience capabilities to enhance creative. (2023)

Unlocking Sales Potential: A Case Study on Emotion AI's Predictive Power

Objective

Meta engaged Sentient to test the ability of Emotion AI to predict sales within social media advertising in comparison to current market survey tools.

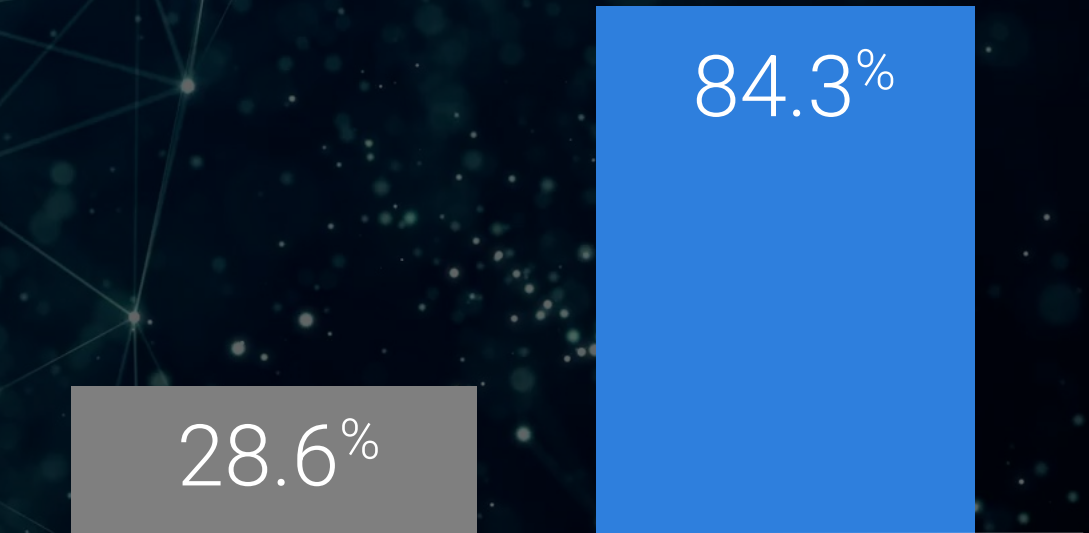
Solution

We tested over 500 ads to validate the accuracy of Sentient's automated behavioral science methods for future large-scale research projects.

Results

The year-long study conclusively demonstrated that Sentient's Emotion AI measures outperformed Meta's previously utilized tools and was 3X more accurate. Sentient's methods outperform traditional explicit measures of purchase likelihood & indices of explicit questions in predicting sales.

ACCURACY PREDICTING SALES



CURRENT MARKET SURVEY TOOLS



SENTIENT INSIGHTS EMOTION AI PLATFORM

Source: Facebook Measurement Council at Meta: Applying neuroscience to brand measurement 10,000 consumers, 53 products, IRI Sales data (2019).

Sentient's 15-Year Validation Journey: Building Trust Through Evidence



Reliable

- Largest global neuro-reliability study
- 510 ads with 40,000 consumers
- Published at Neuromarketing World Forum in Singapore 2019



Sales Prediction

- Consumer brand preference validated for over 10 years with hundreds of thousands of consumer judgments correlated with brand sales data (e.g. P&G, Heineken, Abbott)
- Proportion of emotion model (POE) outperforms the industry standard choice based-conjoint in accurately predicting product sales



Sensitivity

- Sensitivity of the Subtext implicit measure of emotional appeal has been validated to detect the implicit impact of 600 millisecond ad exposures on Instagram.
- Published data of 50 studies demonstrated the Subtext POE model captured significant brand influence 2.5X more often than explicit measures in both social media and TVC tests.



Brand Loyalty

- Implicit self-identification measure of long-term brand attachment and loyalty has been validated in the Sentient Labs and by third party client data.
- Emotional engagement and implicit influence on brand predicted social sharing and views of online ads at a rate of more than 5X industry past-standard Likert Scales of ad effectiveness.



Third-Party Validation

- Independently validated by clients in the top 200 advertisers in the US
- Correlate to in-market brand success metrics including top-of-mind brand awareness & brand preference in-market





SCORE
82

ENGAGEMENT
94

INFLUENCE
69

Moment by Moment Facial Expression Analysis



Automated Facial Action Coding



Valence Ratio



Positive

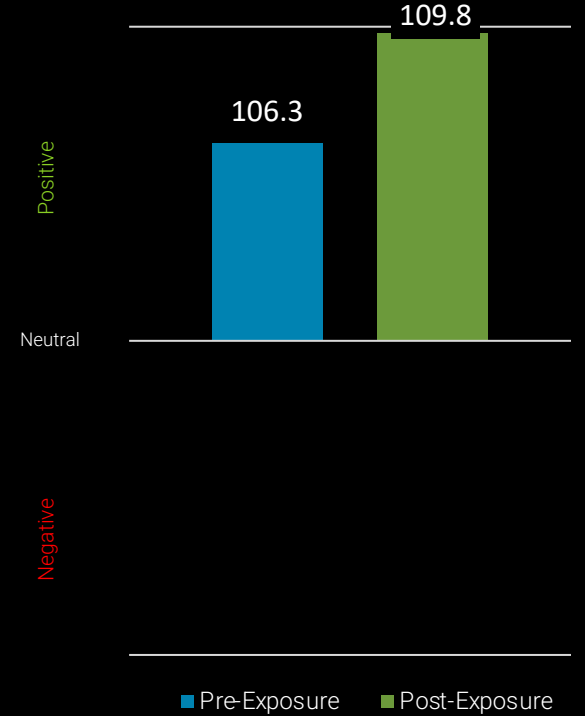


Negative



Implicit Testing

Implicit Brand Appeal





SCORE
82

ENGAGEMENT
94

INFLUENCE
69

Moment by Moment Facial Expression Analysis



Automated Facial Action Coding



Positive



Negative



Viewers who have More Positive Implicit Appeal for Kawasaki after watching



Viewers who have More Negative Implicit Appeal for Kawasaki after watching



Mayo Cat



Evaluating the Performance and Future of Emotion AI

@SentientInsight



Mayo Cat



SCORE
67

ENGAGEMENT
98

INFLUENCE
36

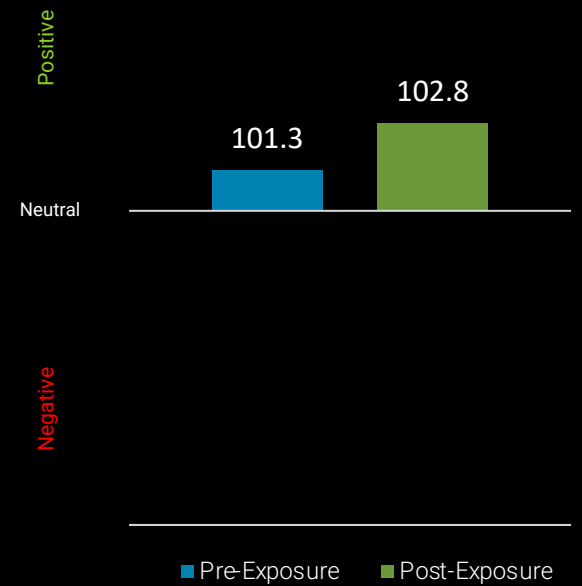


Automated Facial Action Coding

Moment by Moment Facial Expression Analysis



Implicit Brand Appeal



Implicit Testing



Evaluating the Performance and Future of Emotion AI

@SentientInsight





Automated Facial Action Coding

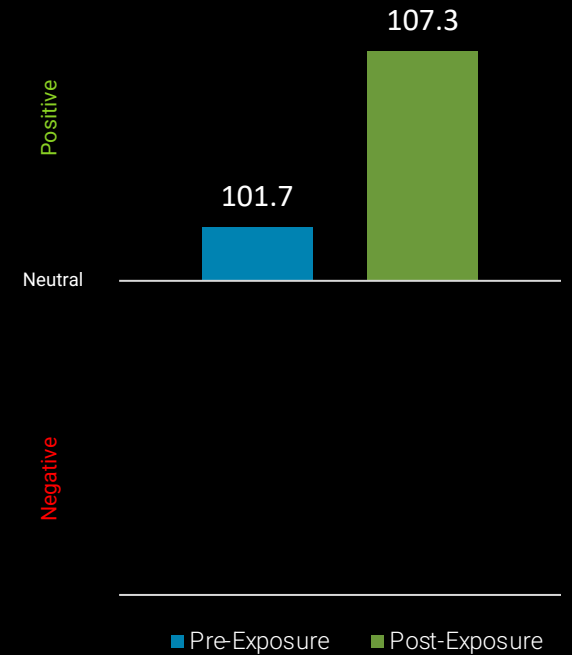
Moment by Moment Facial Expression Analysis



EMOTIONAL ENGAGEMENT
STRONG
MODERATE



Implicit Brand Appeal



* Significant difference 95% confidence level

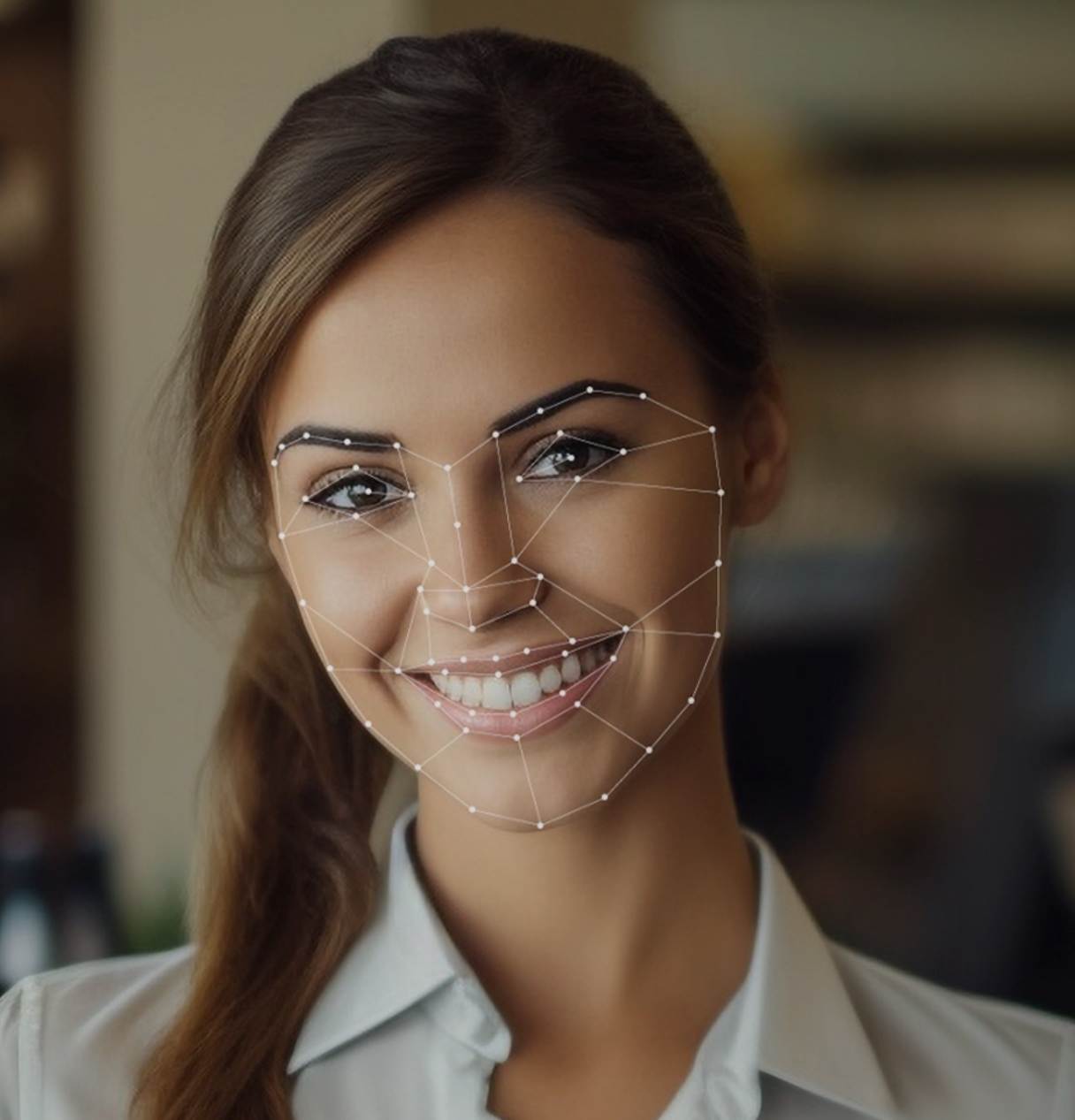


Implicit Testing



Emotion AI

A look at the future.



Emotion AI in Market Research

Opportunities to Improve Communications:

Real World, Real-Time Emotional Responses to Marketing

- Natural viewing environment - using cameras at POP
- Passive measurement captures valence of customers

Emotion AI and Experiential Testing Are the Perfect Match

- Determines whether and how audiences engage with experiential content
- Can pinpoint moments that connect with audiences



Emotion AI will change everything from marketing and innovation to customer experience management to the future of machine/human interaction.

The data we continue to collect will provide a human element to the future of generative AI.



72 Unique identifiers mapped on the human face



15,120 measures of emotion per second



.5 Billion parameter deep learning neural network AI



Millisecond precision response time measurement



1.5B subconscious association database

Discover how our Emotion AI platform reveals the transformative impact of emotions on perceptions of your creative.

- Weekly advertising case studies within Subtext Scorecard
- Performance diagnostic tools
- Meta-analyses for advanced understanding of engagement and influence
- Category level insights on creative effectiveness
- Direct competitor insights on:
 - Creative tactics
 - Successes and failures
 - Competitive emotional positioning
- Asset comparison tool
- Quarterly best practices
- Special content releases including Super Bowl, Social Cause, Inclusivity insights
- Data safe and secure
- Expert analysis



The collage displays several key features of the Sentient Insights platform:

- Subtext Scorecard:** A dashboard showing performance metrics for a video asset, including a heatmap of sentiment and a video player.
- Video Analysis Interface:** A detailed view of a video analysis for 'Bravecto Bravo Bravecto', featuring a video player, a 'Rapid Subtext' overlay, and a 'Change in Implicit Brand Appeal' chart.
- Change in Brand Associations:** A bar chart comparing brand associations before and after an advertisement. The chart shows significant increases in 'Reliable' (130.8 to 132.8) and 'Protective' (138.8 to 132.1) associations, and decreases in 'Trustworthy' (130.2 to 131.7) and 'Safe' (130.2 to 131.9).
- Emotional Expression by Change in Brand Associations:** A legend and chart showing how different emotions (More Positive, More Negative, More Reliable) correlate with changes in brand perception.

Demo Our Platform

VISIT: BOOTH 403 or Online: bit.ly/sds-quirks-dallas