



:) Affectiva
a smart eye company

Generative AI Meets Emotion AI: The AI Disruption in Advertising

Disclaimer: AI-Generated Imagery

Humanizing Technology with Emotion AI

Affectiva builds Emotion AI technology to measure pre-conscious emotional responses to brand content derived from human participants' facial expressions.



World's Largest Proprietary Data Repository

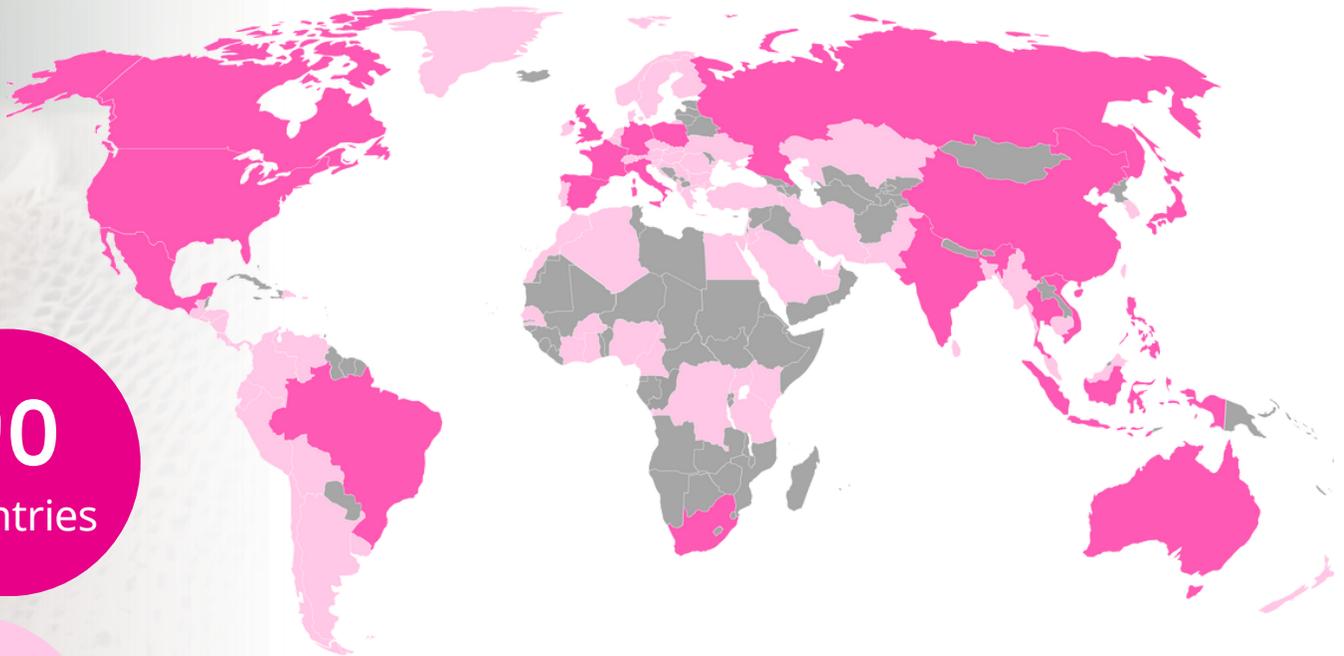
After 12 years in business, [Affectiva has the world's largest data repository](#) with over 8 billion frames analyzed over time. This provides the foundational data for best-in-class algorithms trained on highly diverse data in ages, gender, ethnicity and culture which allows to mitigate bias, and provide relevant country benchmarks for the analysis. That is why Affectiva's technology is used by 90% of the world's biggest advertisers to test consumer engagement with ads, videos and TV programming.

14.7M
faces

90
countries

8B
facial
frames

18 years
of video data



Legend
■ Top 20 Countries ■ Others

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A photograph of two women in a crowd, likely at a sports event. The woman on the left has white face paint with a red cross on her cheeks and is looking intently to the left with her hand near her mouth. The woman on the right has a surprised or excited expression, looking towards the camera. Both are wearing orange clothing. The background is a blurred crowd of people.

The Power of Emotion

Engaging People Emotionally is Critical for Advertising Success



Generating attention

Emotional responses are powerful cues in the brain to pay attention, as the object of the emotion is likely to be of evolutionary significance. Ads that generate emotions are likely to get more attention.

The kicker is that the attention will not automatically extend to the message or brand.



Framing reactions to other ideas or messages within an ad

An emotionally positive illustration of a benefit is more likely to lead to a positive evaluation of that benefit than an emotionally sterile message.

But again, only if the benefit and brand are involved in the emotional narrative — cutaways to brands or messages rarely reap this reward.



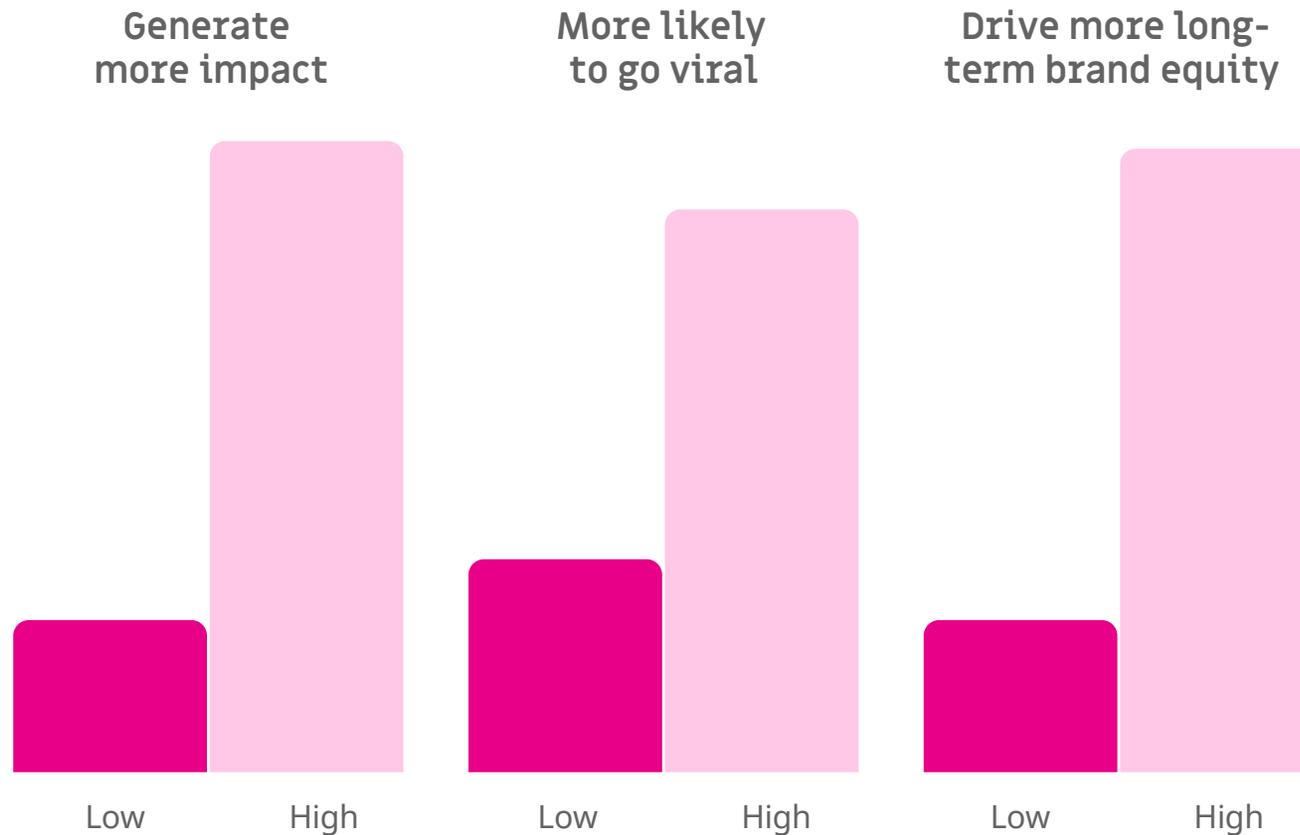
Conditioning responses to brands

Ads which associate the brand with positive feelings are likely to see the brand also become a signifier for positive feelings, and that positive tag can be very powerful when framing later brand decisions.

All being equal, a brand people like will be more successful in market.

Ads that evoke stronger emotions...

At Affectiva, we like to talk about the importance of the emotional journey: the highs, the lows, and the hopes of a positive resolution at the very end. In an analysis done by Kantar investigating the impact of emotional engagement on advertising and brand building, they quantified that ads that evoke stronger emotions are more likely to generate more impact, go viral and drive more long-term brand equity.



Long term brand equity refers to Demand Power Contribution metrics | Numbers reflect median percentiles





Emotional engagement impacts persuasive power of the advertising...

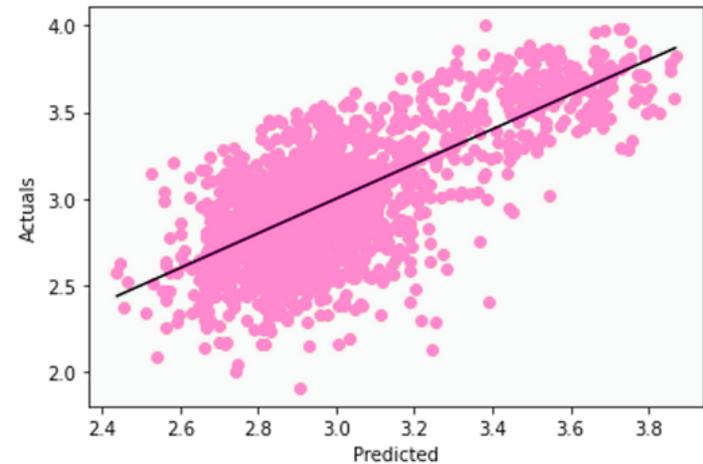
Sales Performance Classification
% high performing ads

Positive Expressions → 😊

Negative Expressions ↓ 😞	48%	59%
	30%	39%

Base: 111 packaged goods ads
 (Affectiva paper, ESOMAR 2013)

Prediction of advertising persuasion
from facial coding signals



Training set: 12495 cases, Hold-out (shown) 1468 cases

...and contributes to
the sales performance

Affectiva and MARS conducted a large-scale facial coding study to measure consumers' emotional responses to advertising. Results showed that engagement measured by facial expressiveness can be linked to positive sales outcomes.

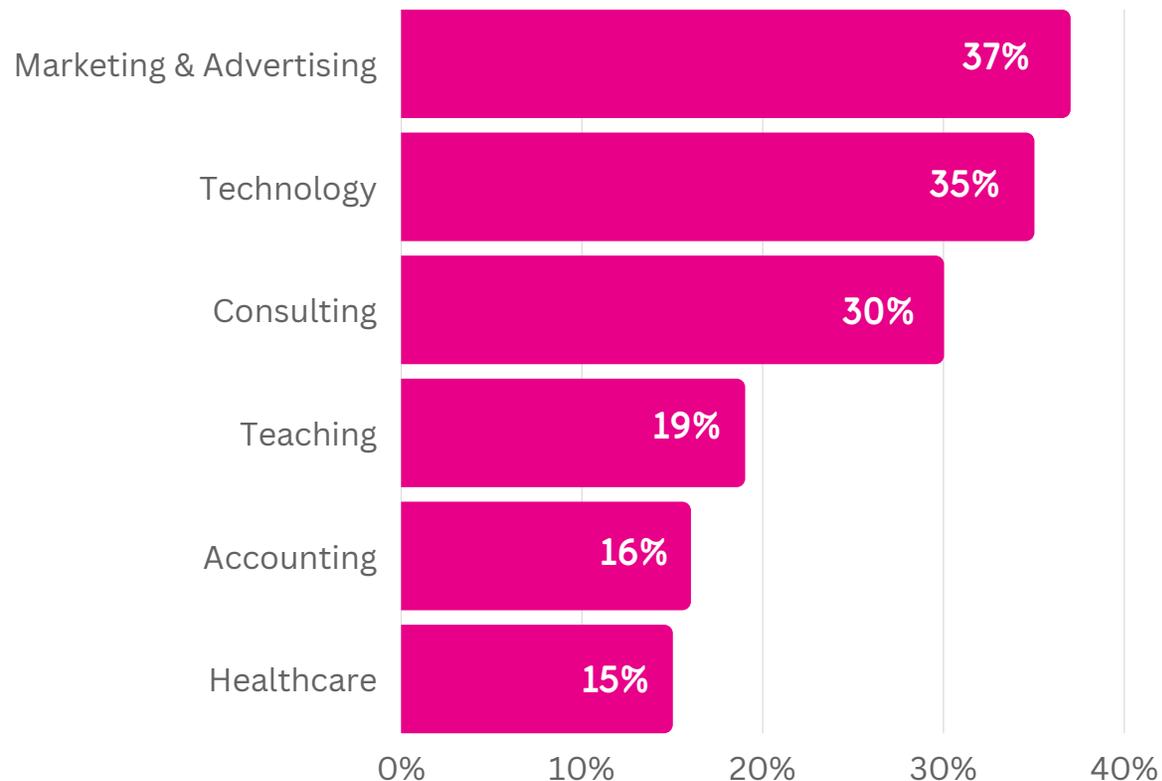
AI Disruption in Advertising



Marketing and Advertising leads the way in the adoption of Generative AI in business

Of 4,500 respondents, 37% of those working in Marketing and Advertising indicated that they have used AI in their tasks.

Rate of Generative AI Adoption in the Workplace in the United States 2023,
by industry



Generative AI proved to be very compelling in some areas of the creative process

The images have been created with the use of Midjourney AI. Creative director, Eric Groza, has been experimenting with 'what if' brand collaborations, and these images represent unedited outputs from the AI.

One critical note to mention is that a human touch was required before the final images were generated. The original creative idea behind the collaboration needed dozens of iterations of carefully edited prompts to create what became the final results.

Disclaimer: The images generated are the results of experimenting with AI. The results do not reflect the views or plans of either brand. This post is meant for educational purposes.



But the question is...

**Can AI create a
truly emotionally
engaging story?**

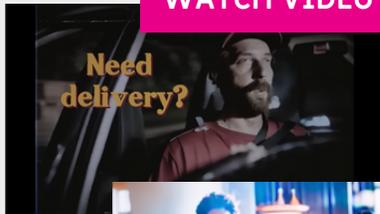


Generative AI can be Used in Different Ways

Gen AI Fully Generated Creatives

No brands so far have used this 'wild' approach, but some experimentation using generic categories has gone viral.

WATCH VIDEO



WATCH VIDEO



WATCH VIDEO

Combination of various AI tools - ChatGPT-4, Midjourney, Runway Gen2, Eleven Labs, SOUNDRAW AI, Adobe After Effects.

Gen AI as a Creative Element

Some brands have used Gen AI as an element to engage, given it is so topical — even if only part of the ad are AI — generated.



WATCH VIDEO

ChatGPT was used to copy-write a script for a Mint Mobile ad.

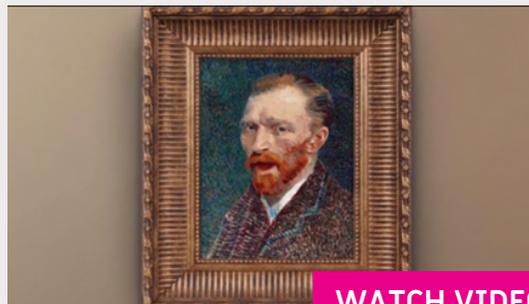


WATCH VIDEO

VFX AI tools were used to alter the characters appearance.

Gen AI as a Tool to Enhance Creative Process

The most subtle use of AI, more to create potential efficiencies in the process.



WATCH VIDEO

The scripts are 100% generated by AI, only edited for length and accuracy. Deepfake AI is used to animate the characters.

Affectiva Puts Generative AI to the Test

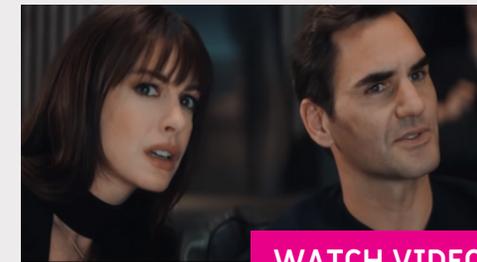
Fully Gen AI Generated Creatives



Gen AI as a Creative Element / Tool to Enhance the Creative Process



'Traditional' Ad – as an Additional Benchmark



A tourism ad for Switzerland that used a number of powerful creative tools of storytelling, celebrities, and humor.

The ads above were chosen for a case study, evaluating emotional engagement via facial expressions and survey questions.

Our team wanted to test out several pieces of content that implemented aspects of Generative AI ranging from fully Gen AI generated creatives and ads that used Gen AI as a creative tool or element, comparing it with a more 'traditional' advertisement with no Gen AI involvement. In testing these ads, we wanted to further explore whether content that uses Generative AI can be compelling, emotionally engaging, and likable by consumers.

Lessons Learnt and Emotions Detected



1

AI can be Emotionally Engaging

The ads created with the use of AI ([Pepperoni Hug](#), [Orange Juice](#), [Mint Mobile](#), [VisitDenmark](#)) show equally strong emotional response and positive engagement (Smiles) compared to more traditional ads ([MySwitzerland](#)). This can explain why user generated content created with AI tools goes viral and exceeds over 1M views on YouTube.



Pepperoni Hug



Orange Juice



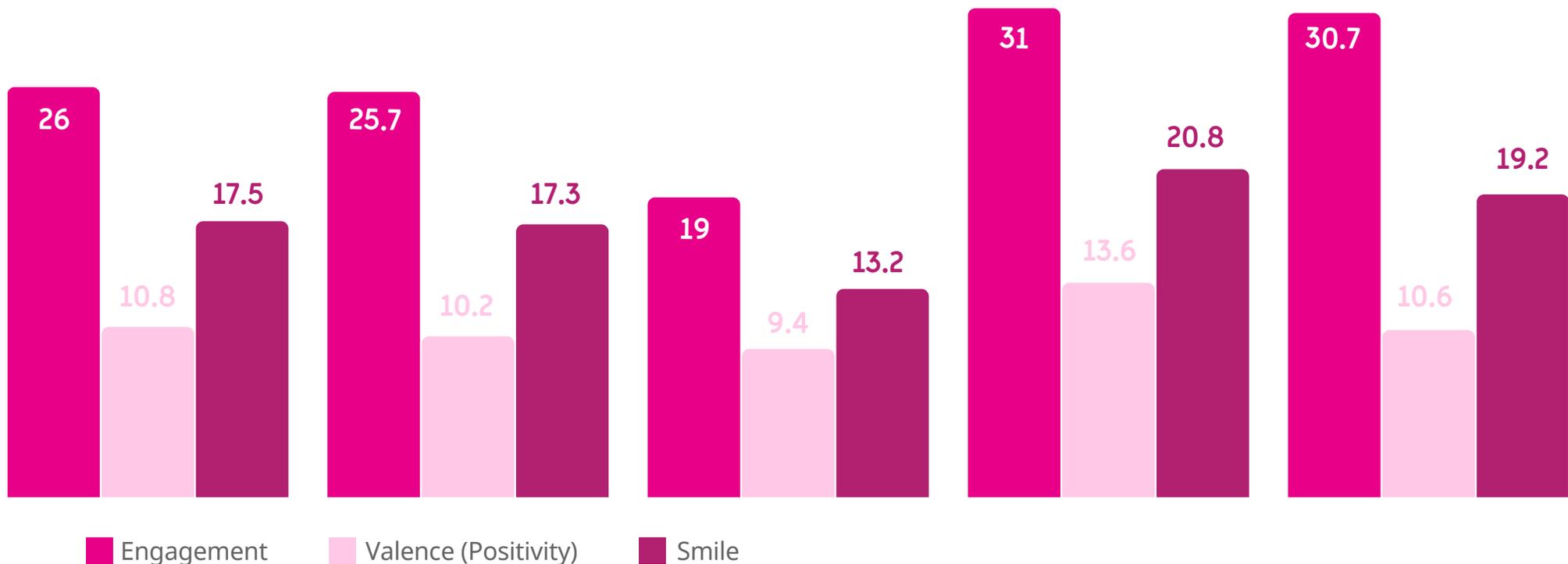
Mint Mobile



VisitDenmark



MySwitzerland



2 If Gen AI Lets Loose It Can Be Laughable

Usually levels of smiles contribute to the overall Enjoyment (claimed); however, for the **Orange Juice** ad that was fully created by AI, the most differentiating factor is the awareness of AI creation.

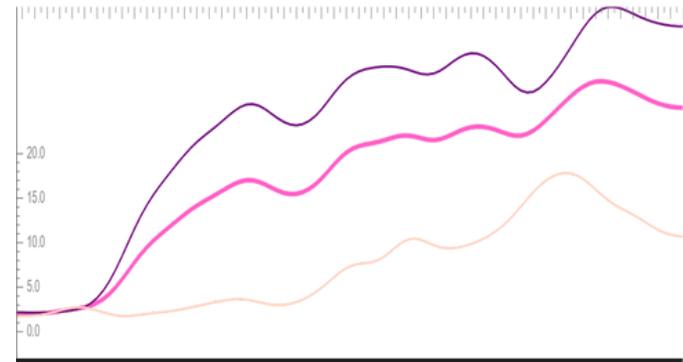


This suggests that people are reacting more to the fact that AI generated this ad rather than the actual narrative of the content. Viewers who did not realize that it is an AI scripted ad are a lot less positively engaged and more disturbed. Therefore, the type of engagement has a lower potential to positively impact the brand.

Orange Juice Ad

Smile by **AI Awareness**

"Did you realize this ad was scripted by AI?"



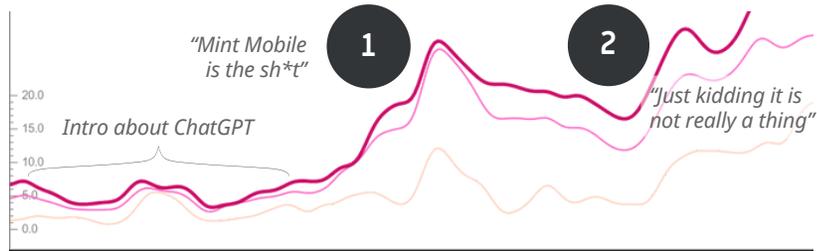
■ Avg. of All Participants ■ Yes ■ No

3 Having a Clear Reference to Gen AI Use Improves Emotional Response

Mint Mobile Ad

Smile by **AI Awareness**

"Did you realize this ad was scripted by AI?"



■ Avg. of All Participants ■ Yes (72%) ■ No (28%)

When an AI tool is used as a creative element to engage the audience (here, poking fun at AI), it is vital to make the fact known to viewers.

For the **Mint Mobile ad**, despite ChatGPT being mentioned in the ad, 28% of respondents did not realize or recall that ChatGPT, an AI tool, was being used in this creative.

While they did react to the intended jokes, they are generally less positive about the creative compared to those who did realize this ad was scripted by AI.

AI Can Be Funny Too

4

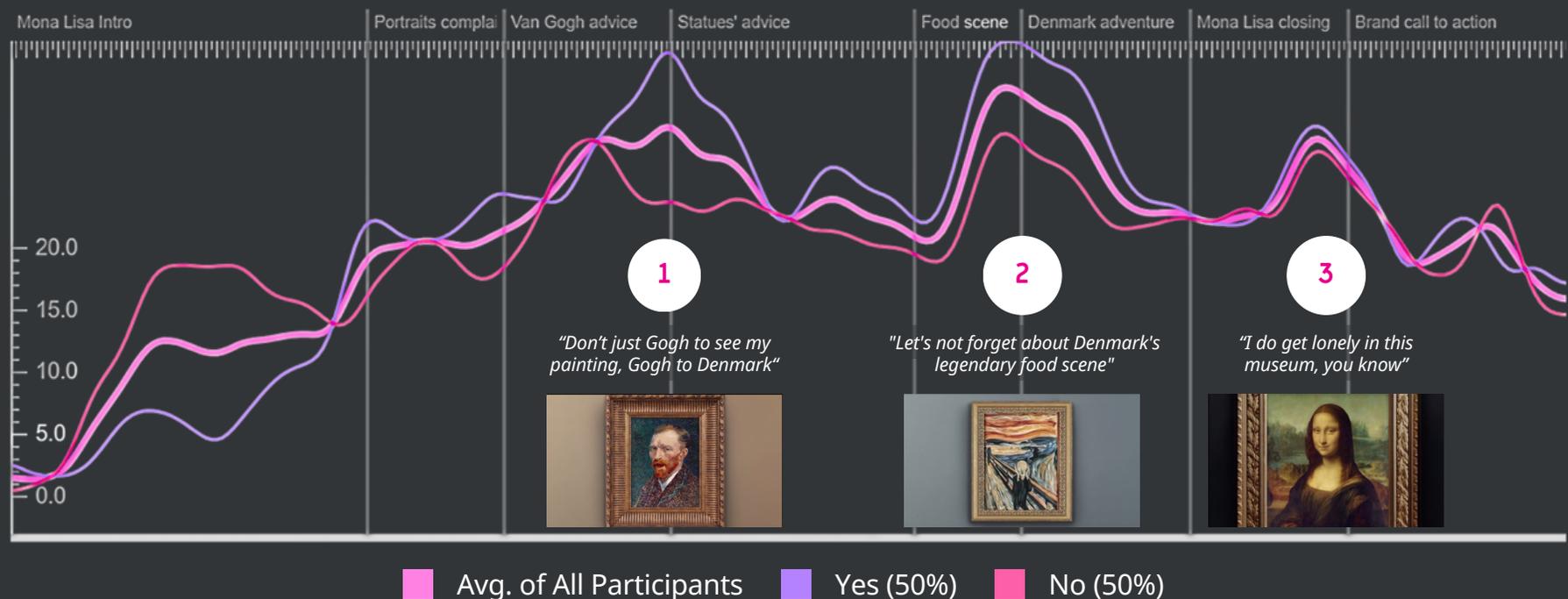
When used as a creative enhancement tool, AI can create truly emotionally engaging stories that bring the narrative alive. In the [VisitDenmark ad](#), the positive engagement is not just coming from amusement about AI animated talking paintings, but people are reacting to the AI-written jokes.

Although only half of the participants realized that it was scripted by AI, we see the same levels of positive engagement regardless.

VisitDenmark Ad

Smile by **AI Awareness**

"Did you realize this ad was scripted by AI?"

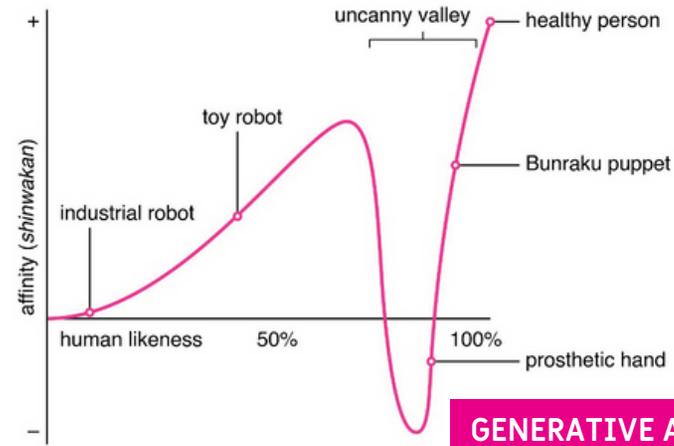


Uncanny Valley Alert

What is the uncanny valley theory?

The uncanny valley theory is a concept that suggests humanoid objects that imperfectly resemble actual human beings provoke uncanny or strangely familiar feelings of uneasiness and revulsion in observers.

Generative AI, in its current stage of development, is capable of creating visuals of humans. Yet, it is still struggling with creating realistic animations and compelling emotional expressions.



Source: [Masahiro, Mori, "The Uncanny Valley", IEEE Robotics & Automation Magazine, 19\(2\):90-100 \(June 6, 2012\)](#)

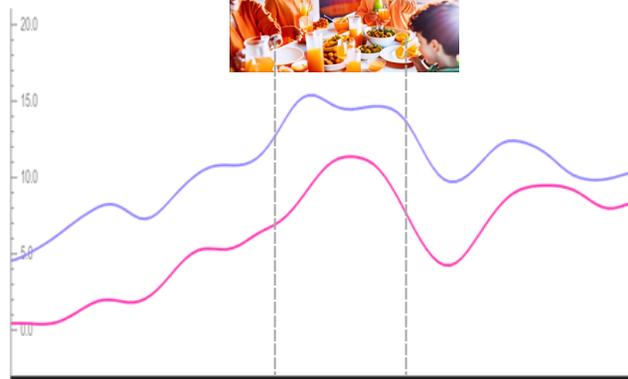
5 Uncanny Valley Can Impact Overall Emotional Positivity

The combination of facial expressions shown are typically associated with more negative reactions (cringe) and may affect overall Valence.

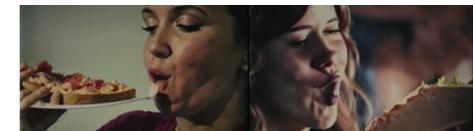
In [Orange Juice](#) and [Pepperoni Hug](#), our Emotion AI detected strong negative cognitive reactions from the audience.

These moments of negativity occurred most when the AI-generated human faces and animated emotions appeared on screen.

Orange Juice Ad



Pepperoni Hug Ad



■ Brow Furrow

■ Lid Tighen

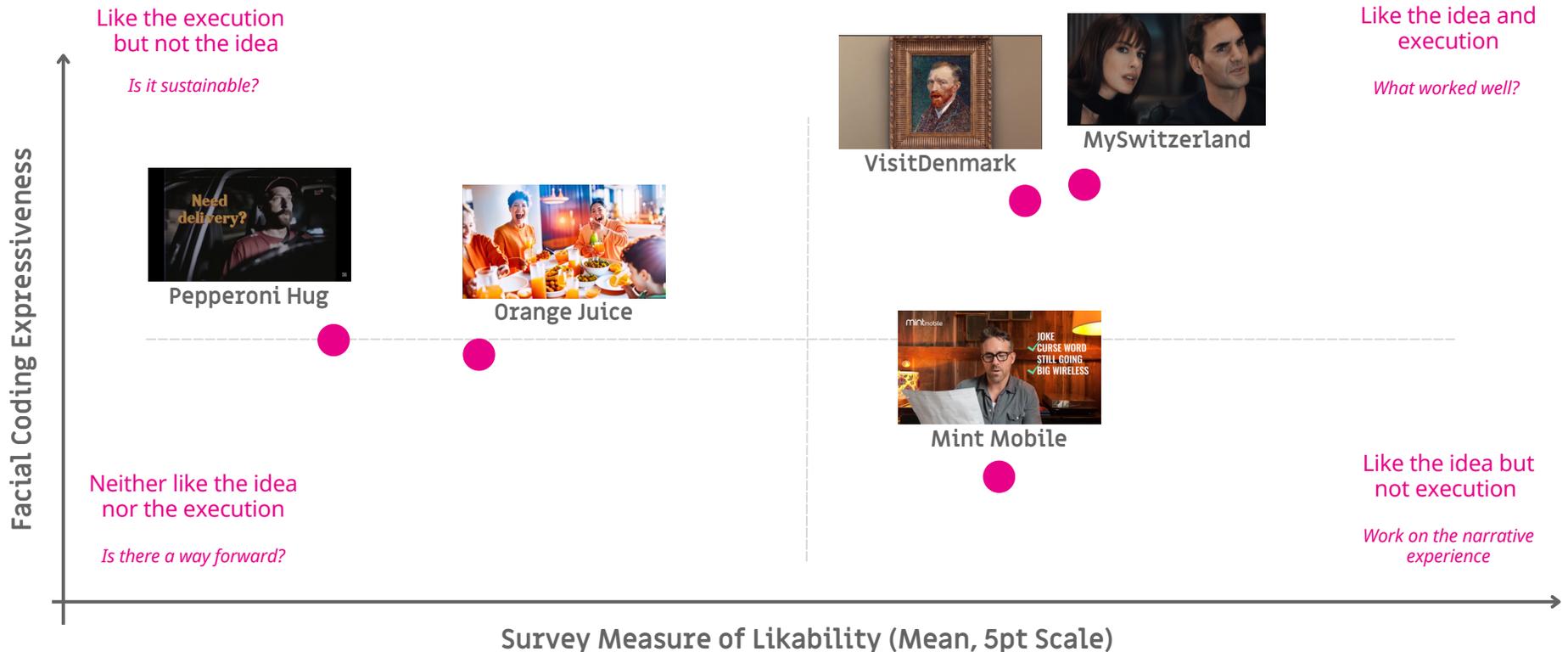


Not All Emotional Engagement Translates Into Conscious Likability

6

While fully AI generated ads create good levels of emotional reaction, the audience does not always rank it well in claimed Likability. Therefore, these ads have less potential to create the desired impact for the brand.

However, when artfully done, such as [VisitDenmark](#)'s mixed use of AI tools and creative idea, likability can be on par with more 'traditional' high budget ads that are created by humans.



Creative Industry Professional POV on the Ads Tested



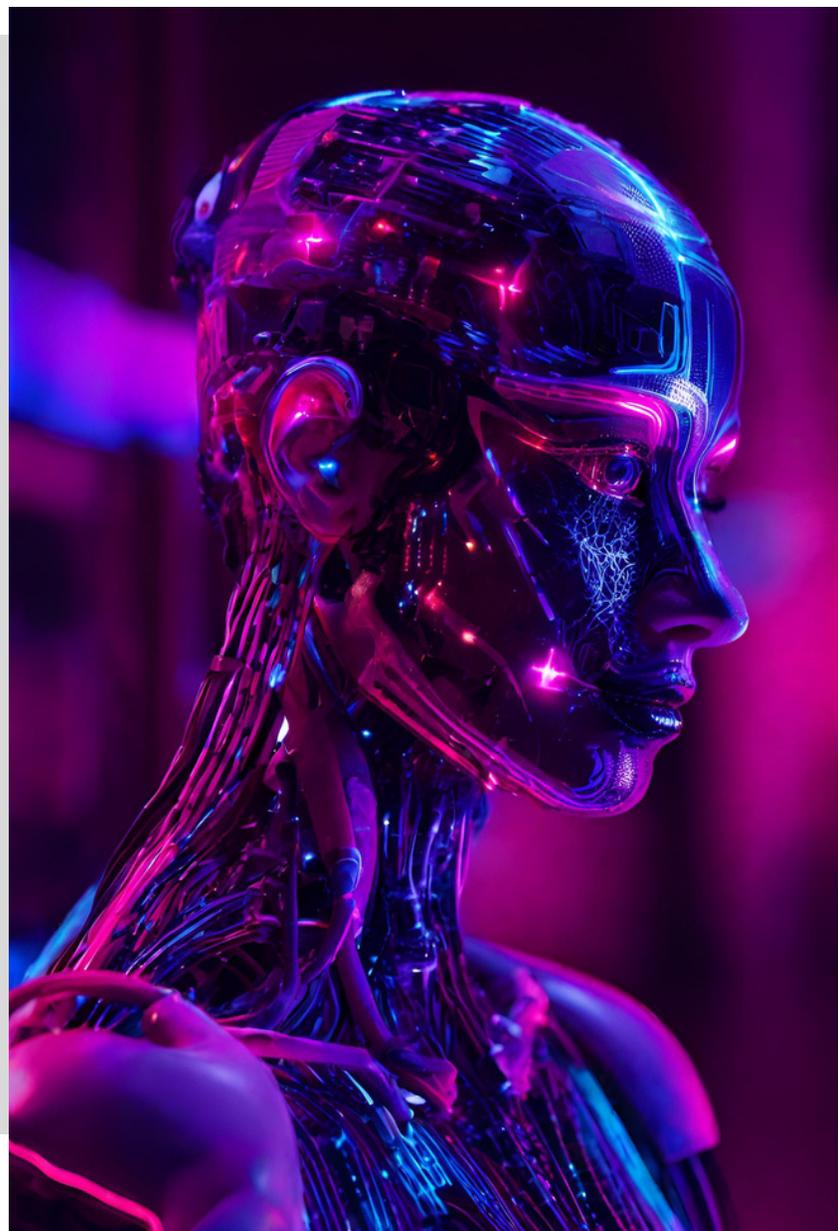
Eric Groza

Executive Creative Director,
McCann Worldgroup

“AI seems impressive in those ads [[Mint Mobile](#), [VisitDenmark](#)], because it is wrapped in human talent. The point is, without a talented person with good taste prompting and selecting the outputs from AI, and then a talented person editing and adding their design to complete total packaging of the content – there wouldn't be much value to the pieces.

Yes, it is easier than ever to make something. Many barriers to creating content have been eliminated. **You still need talent and taste and understanding of the medium and creative to make something of value.**”

“AI will not replace you [creator], but if you don't learn how to use the tool, a person using AI will.”



Key Takeaways



Generative AI in the Creative Process

AI Generated Content Can be Emotionally Engaging

Being a 'trendy novelty', AI can be used as a creative element to build engagement – but to do so successfully, it must be obvious.

To overcome a potential rapid wear out effect, maximize the impact by connecting the use of AI with the message delivery and the brand, as there is little value to implementing AI for the sake of it.

Emotion AI Can Help With Your Gen AI Ad Effectiveness

It is important to pretest creative content with consumers.

Understanding ad performance will bring valuable insights to advise your creative and media strategy and greatly improve its ROI.

This is even more important when using new creative tools such as AI.

AI Can Assist in the Creative Process

AI has a potential to enhance and optimize the creative process and become a beneficial tool in the hands of content creators.

Have a consumer-centric creative idea in mind and human input in the execution to create standout content.

Watch Out for the Uncanny Valley Effect

Today Gen AI is not yet at the stage to create compelling human-alike video content, therefore the outputs may create negative emotional responses that potentially transfers into the brand associations.

Even with the AI advancements generating human representation in videos, the Uncanny Valley effect should not be discounted.

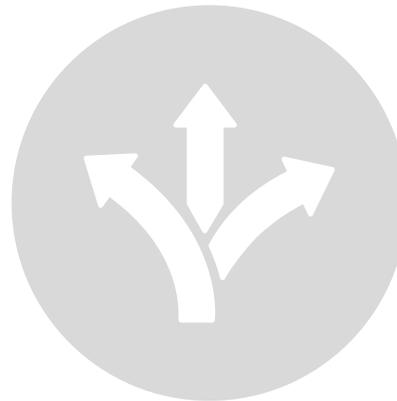


Working with Affectiva



Trusted Data

Our technology is used by over 90% of the world's top advertisers, and 26% of Fortune 500 companies.



Actionable Guidance

Multiple Creative & Marketing applications.



Collaborative Approach

We're a technology company, but would partner to help design, train and equip your teams to generate the insights you need.





Affectiva, a Smart Eye company, is the pioneer of Emotion AI, humanizing technology to bridge the gap between humans and machines. Our Media Analytics division helps companies gain a deeper understanding of how consumers and audiences engage with their content, products and services. Our technology also fuels Smart Eye's automotive Interior Sensing solutions, providing a deep understanding of human behavior in vehicles.

If you would like to see a demo of Affectiva's Media Analytics solutions, please [contact us](#) today.



affectiva.com/contact-us