



Why Product Quality Matters More Than Ever

Client Webinar – Product Testing Today

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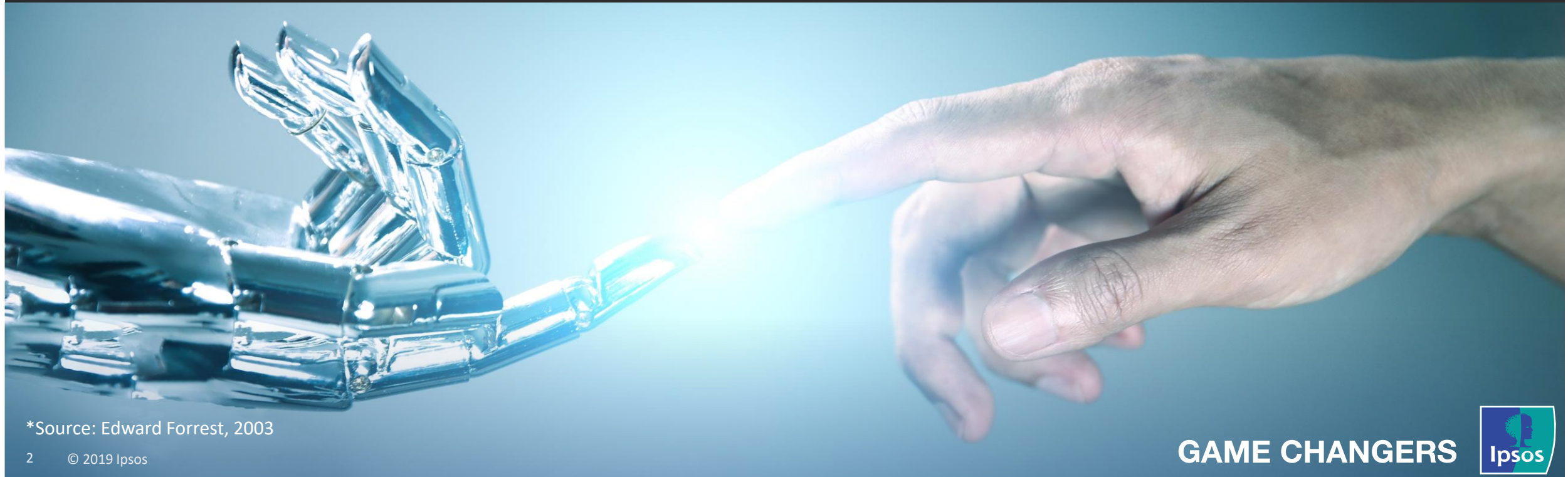
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GAME CHANGERS



100 years of marketing research*

From observation and listening in the early 1919's ...
back to a stronger focus on listening and observation



*Source: Edward Forrester, 2003



1998:

- **Don't get into a stranger's car**
- **Don't meet people alone from the internet**

2019:

- **Literally summon strangers from the internet and get into their car**

Product QUALITY matters more than ever

- *Competitive Environment is changing through rise of e-commerce-> Products face new benchmarks*
- *Increasing prices in production is creating margin pressure -> Products need to be developed efficiently*
- *The voice of consumers about product performance is more dominant -> Products must stand more by their own*



We need technical rigor with prescriptive guidance at a faster pace using different data sources to support product development at any stage

“

A BRAND IS NO LONGER WHAT WE TELL
CONSUMERS IT IS ...

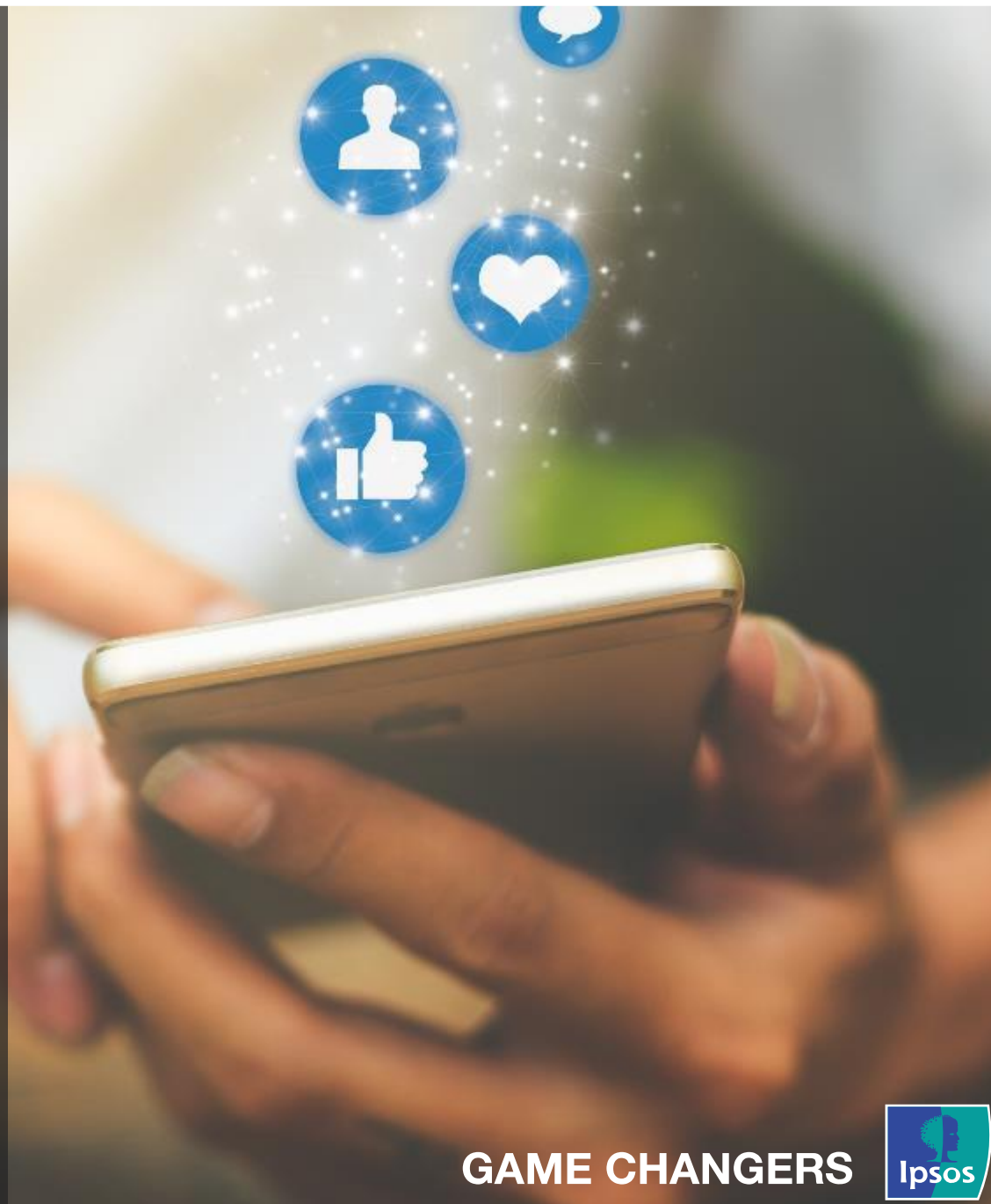
... IT IS WHAT CONSUMERS TELL
EACH OTHER IT IS

”

SCOTT D. COOK

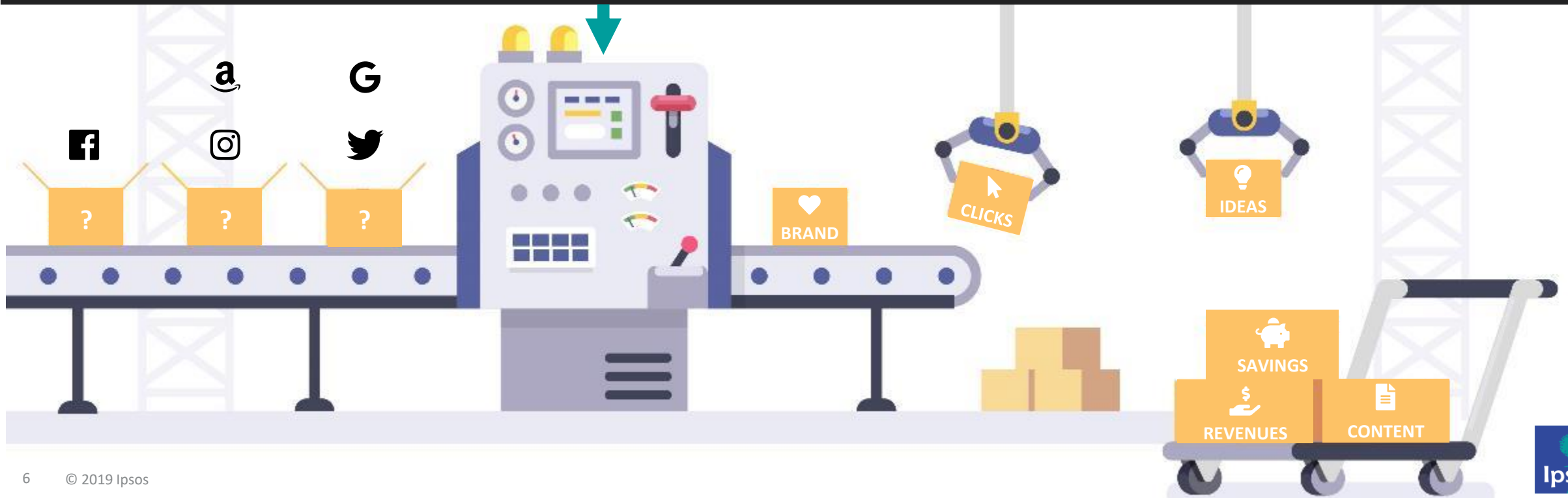
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P&G



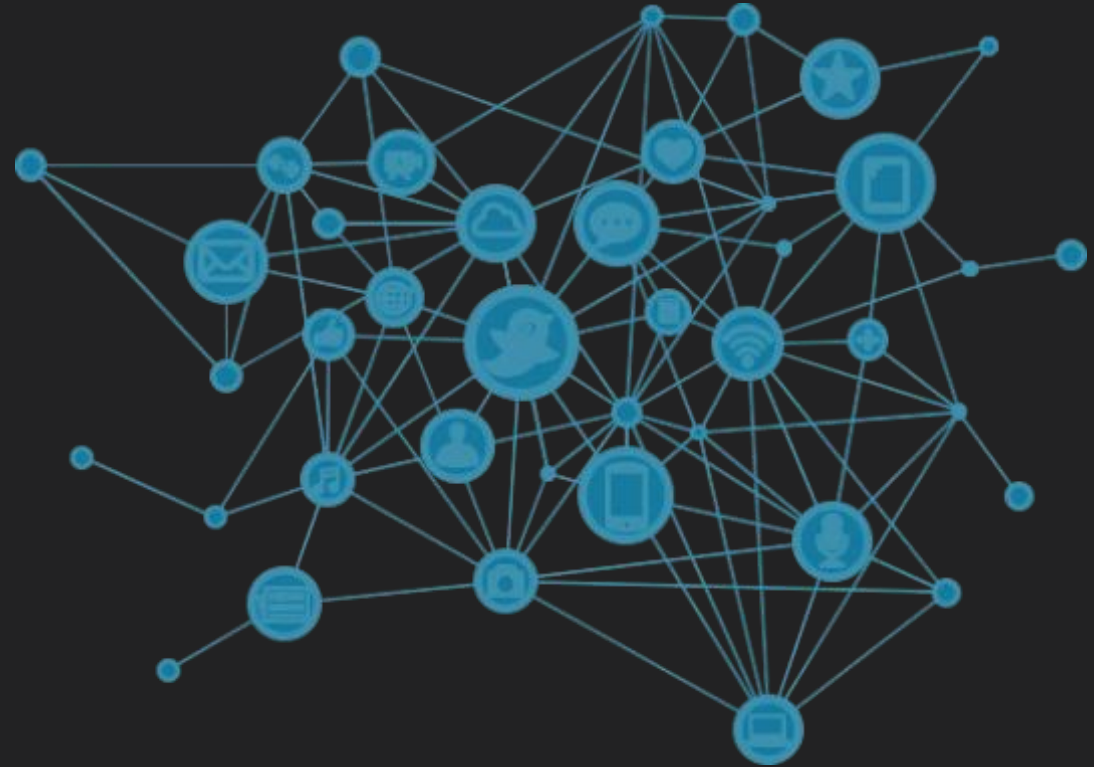
DATA IS JUST DATA UNTIL YOU MAKE SENSE OF IT

Businesses and consumers produce more data than ever – therefore we need technical rigor with prescriptive guidance at a faster pace using traditional combined with new sources of available information



Utilising review data to gather feedback on products, analysed through a...

...product testing lens



We have done extensive R&R on **Product Intelligence**

Results

Product Intelligence **without**

Product Placement:

Using our own panel for ratings and reviews instead of e-commerce provides the advantage of having demographics

Product Intelligence **with** Product Placement provides time advantage (3 weeks of reduced project time) and cost advantage 20-30% reduction

Overview of Product Intelligence R&D legs on ice tea

1 **Traditional post launch benchmarking** study with 35min questionnaire and product placement

2 **E-Commerce Rating and Review.** We analyzed here the consumers rating and review from e-commerce platforms

3 **Simulation of E-commerce Rating in Review in our IIS online panel.** IIS screened users of the products. Then we asked them to rate and review

4 **Product Placement with rating and review questions.** Just like in a traditional PT we placed products but just asked two questions

Product Testing: Research on Research
Pilot Study Iced Tea

Version of January 15th 2019

Pilot background

Research on research initiative in post-launch product testing

Ipsos recently launched a *research on research* initiative to experiment with new ways of post-launch product testing. This investigation consists of 4 separate research legs with each of them exploring post-launch benchmarking in a methodologically different way.

Point of reference is a benchmarking study conducted focusing on iced tea products (Lipton vs. Luzianne).

This document covers the evaluation **of one research leg: *the analysis of consumer product reviews that have been generated via an online survey.***

This data was then processed by a semi-automated, researcher-trained text mining approach.



VS.



Full online questionnaire

The core of the survey was a written product review like in online shops

Q1. Product Rating

[SINGLE PUNCH PREQUAL]

Please rate this product.

[PROG: INCLUDE PRODUCT IMAGE BASED ON CELL ASSIGNMENT. SHOW 5 POINT SCALE WITH STARS]



Q2. Product Rating

[OPEN]

Today, many companies in social media provide the opportunity to people to write reviews about the products they are using or have used. What people write about their experience with the product, helps others who may be thinking about buying this product.

You gave [INSERT START RATING FROM Q1] stars for _____ [INSERT BRAND "LIPTON" OR "LUZIANNE" ACCORDINGLY WITH THE CELL], now we would like you to write a product review.

Please take a few moments to think about your experiences with the product you received from us.

What would you want to share with others about this product? You can also imagine you would tell your friend about this product. It can be anything ... things you liked or disliked, positive or negative thoughts. There are no right or wrong answers and more details are better.

Q3. Product Rating Part 2

[OPEN]

[IF LESS THAN 140 CHARACTERS IN Q2 ASK Q3]

Is there something else that comes to your mind and that you want to share with others? It can be anything...the taste of the product, preparation process or the packaging. There are no right or wrong answers.

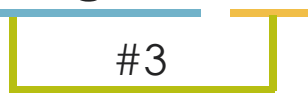
During text mining, pre-identified phrases were assigned to product features

Exemplary review text

“This tea is easy to make and has a great taste.”



But it comes in a badly designed box.”



— Concept

— Driver

— Phrase (= concept + driver)

Phrase #1 → Preparation (positive)

Phrase #2 → Taste (positive)

Phrase #3, 4, 5 → Packaging (negative)

Explanations

- The text mining software automatically detects meaningful text components (incl. tonality) within all review texts.
- A research-led training focuses on assignment of so called *phrases* to different categories (in our case: product features).
- The software automatically detects a tonality for each phrase. Depending on the specific context, this sentiment can be manually overridden if necessary.
- Annotated data is exported afterwards for creating tables and further analytics.

Product feature comparison

Most of the 2015 questionnaire dimensions could be replicated but there are new dimensions identified

Replicable product features	Non-replicable product features	Newly discovered product features
Overall Opinion	Balance of Aroma, Color and Taste	Preparation
Appearance		Packaging
Flavor		Instructions
Mouthfeel		Quality
Refreshing		Ingredients
Bitterness		Value for Money
		Smell

Insights

- Except the product feature ‘Balance of Aroma, Color and Taste’, all other dimensions from the 2015 study could also be identified within the data during text mining assessment. Brand dimensions were also identified but this relates more to the fact that the R&D study was branded and not blinded.
- This shows that consumers intuitively refer to the majority of the features that were part of the original questionnaire but also that the traditional questionnaire may not cover all relevant dimensions.
- Therefore big strength of product intelligence approach is to detect further, complementary product features via bottom-up data exploration. **A total of 7 additional product features could be detected in this way.**

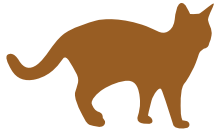
But we need to deal with sarcasm and irony in review data

- Applying AI “probalistic linguistics”
- Considering a large database of words, sarcasm expressions, idioms etc.
- „Neighbor Scores“ of individual words are derived and the probability of words estimated helping
- Optimization of tonality of a review text on individual level and then aggregated

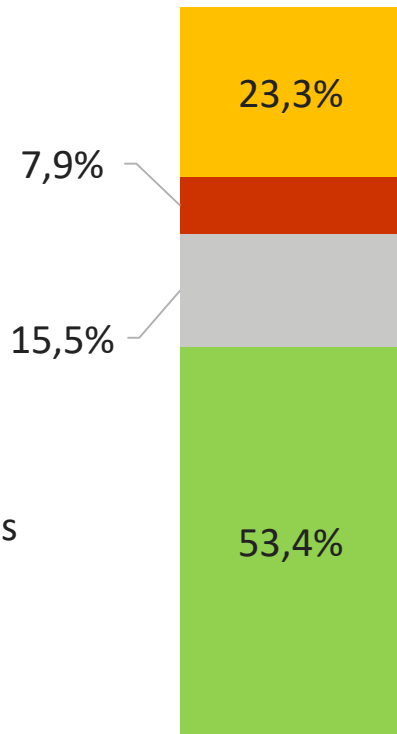
This is one of Crichton's best books. The characters of Karen Ross, Peter Elliot, Munro, and Amy are beautifully developed and their interactions are exciting, complex, and fast-paced throughout this impressive novel. And about 99.8 percent of that got lost in the film. Seriously, the screenplay AND the directing were horrendous and clearly done by people who could not fathom what was good about the novel. I can't fault the actors because frankly, they never had a chance to make this turkey live up to Crichton's original work. I know good novels, especially those with a science fiction edge, are hard to bring to the screen in a way that lives up to the original. But this may be the absolute worst disparity in quality between novel and screen adaptation ever. The book is really, really good. The movie is just dreadful.

Providing detailed insights on product performance

Top phrases for smell (cat)



Phrase distribution



- ambiguous
- negative
- neutral
- positive

Top phrases

- smell – good
- smell – nice
- smell – strong
- smell – strong
- smell – bad
- smell – awful
- smell – fishy

Exemplary verbatim

- “My boys love this for their meals. It **smells good** to me as well as them, it looks good and comes easily out of the packet [...]”
- “Nice delicious food for cats. **Smells** and looks **nice**, most cats probably will like it. Very pretty tin, nice to give as a gift as well.”
- “[...] Very **strong smell** that seemed to put my cat off, he wouldn't eat it. Disappointing for a well known brand.”
- “My cat eat this immediately. He loved it! **Strong smell** which he seemed to enjoy. Would definitely recommend.”
- “Just received a free sample, and it looked and **smelled so bad**, I would not even put down for my cats to try! Glad I did not buy.”
- “[...] The cats hated it! Now I've got four cats and you would think at least one of them would eat it and it **smelled awful**, finished up giving it to the dogs. [...]”
- “My cat loved the **fishy smell** as soon as I opened the lid! Good portion size too...he can be greedy at times. [...]”

Capturing implicit and explicit data in product testing



Technology enables more behavioral research

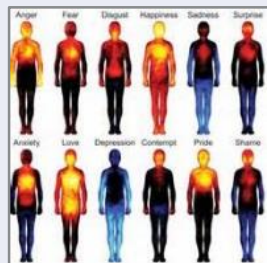
Behavioral science | To add a layer of system 1 behavior to explicit measures



VR and AR | Virtual and Augmented Reality that can be linked with sensory



Implicit Reaction Time | Reaction time to quantify strength of association for attitudes, perceptions and intentions



Biometrics | Thermography and GSR (Galvanic Skin Response) to uncover subconscious reactions

We will leverage the breadth of our VR expertise as we partner to evolve CLTs

VR Demos/ Marketing events



- Research & Results VR Installation
- Schiphol Airport Passenger Journey
- Virtual Car Clinic Demo

Studies/Immersion



- Train interior design research
- Global pilot virtual shopper
- Package design & shopper research
- Sales pitch scenario research
- 360 Immersions in the moment context & workshop stimulus

Car Clinics



- 3D vs. 2D content comparison clinic
- Real vs. Virtual Car clinic ROR

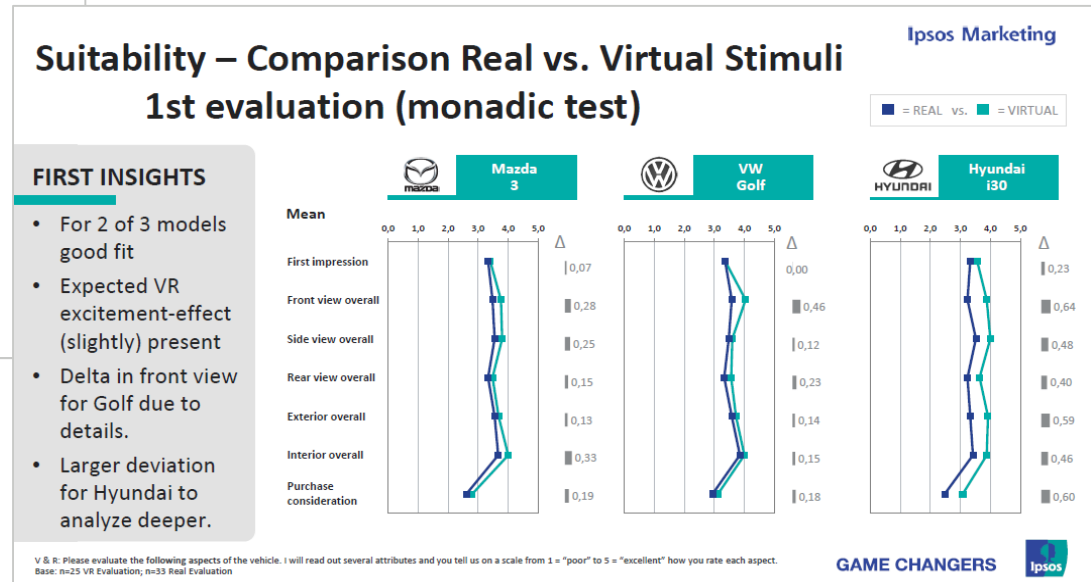
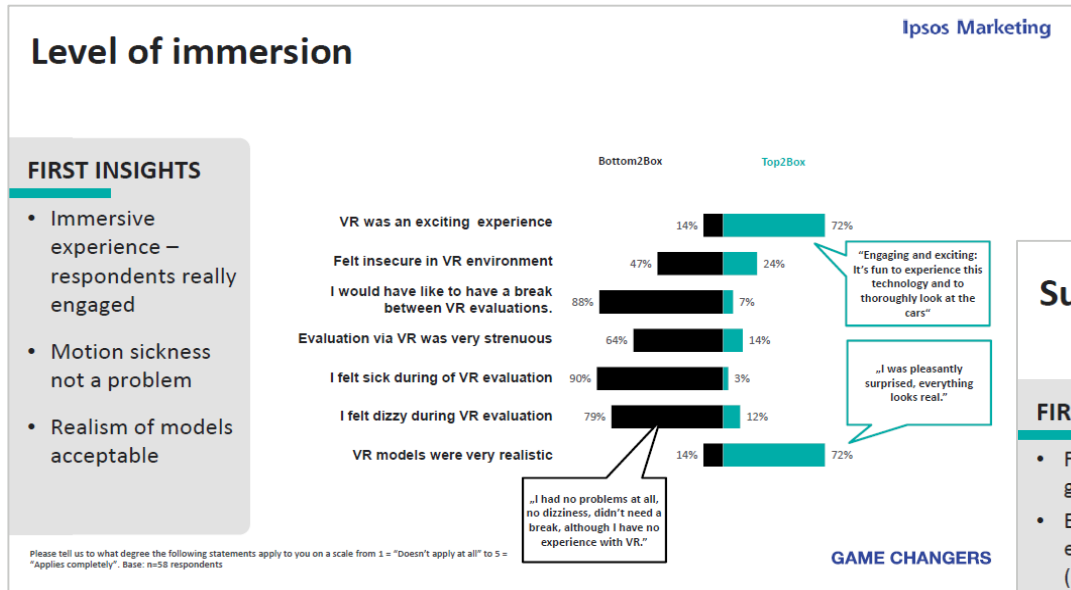
VR Technology



- Mobile VR
- Samsung Gear
- Oculus Rift
- HTC Vive

... and we have experience assessing the impact of virtual reality immersion on consumers & comparing real vs. virtual stimuli through internal research-on-research

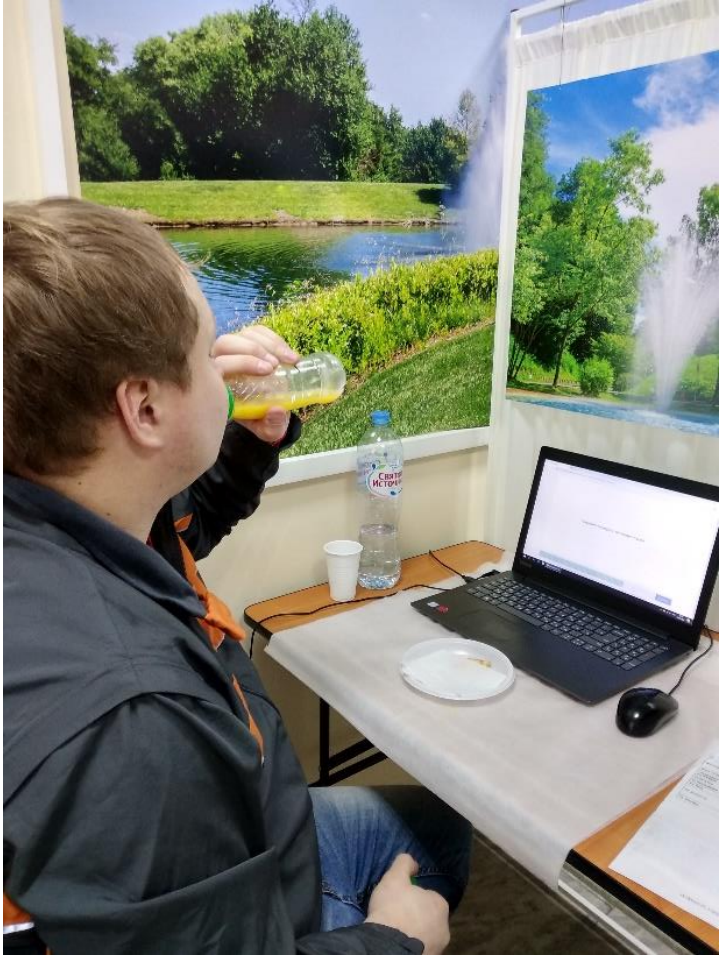
Example findings from Ipsos' research-on-research validating the effectiveness of using virtual vs. real stimuli for car clinics as a more cost efficient way of conducting future tests.



Source: Ipsos presentation for clients in Germany. Full deck can be provided if desired.

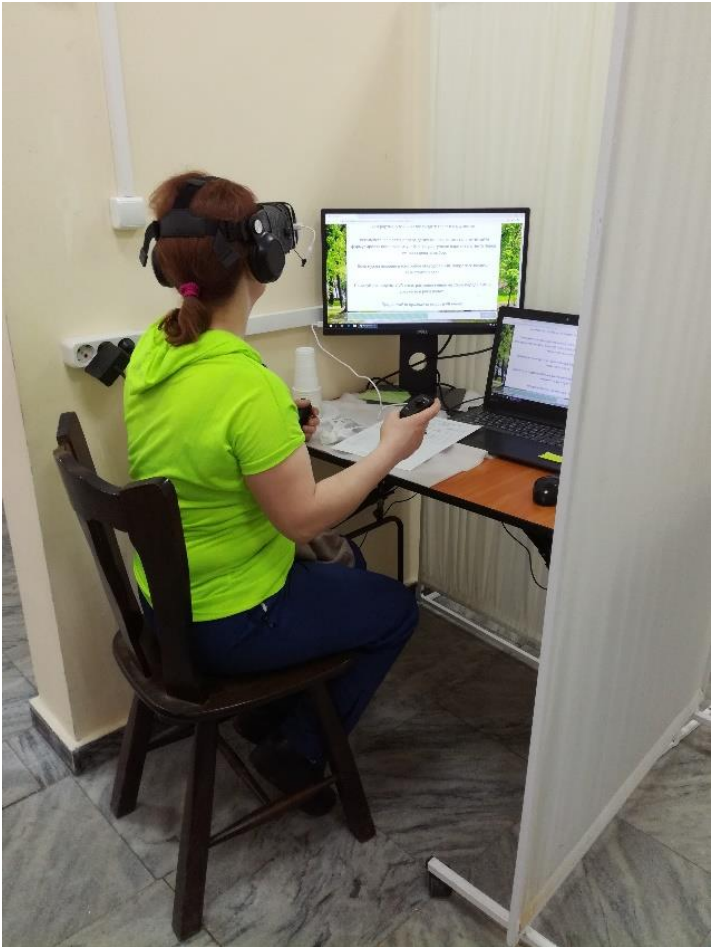
Seasonality effects in consumption – a case study

SUMMER IN MIND

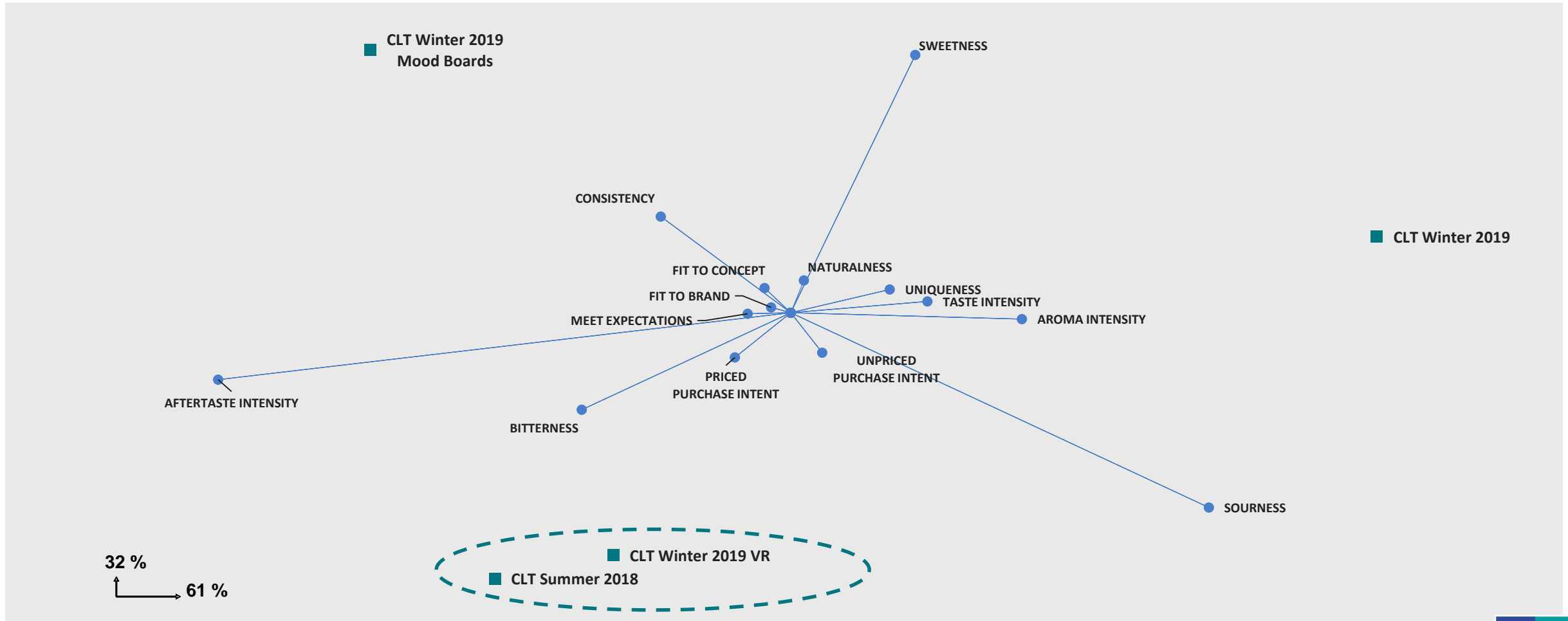


What it looks like

VR SUMMER



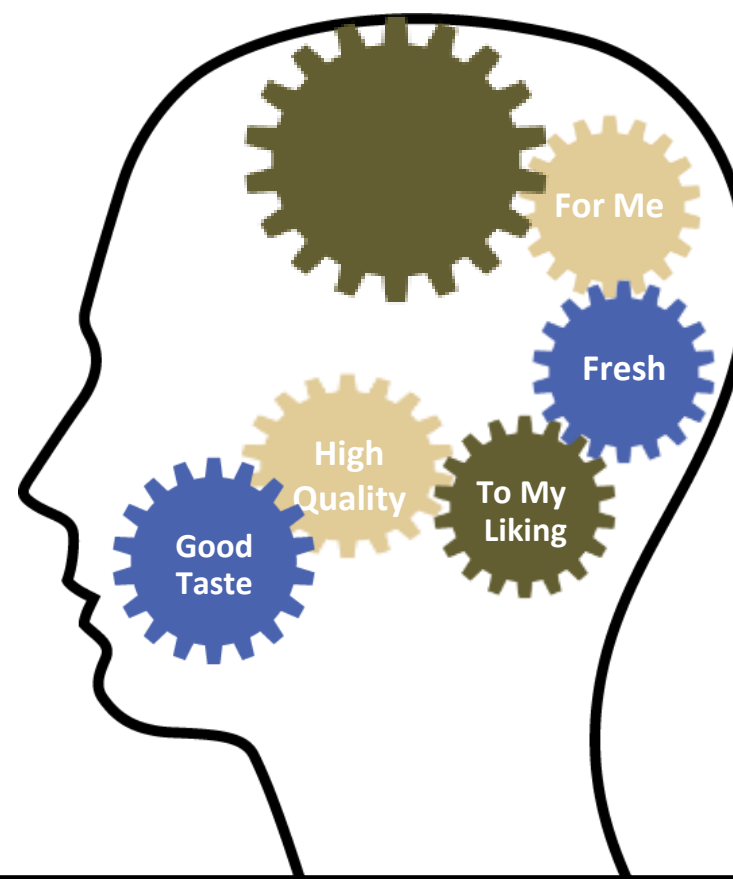
VR is the closest to the imitation of the summer period



Base (respondents): 100 (summer cell) / 200 (per winter cells)

Implicit Networks Theory

Measuring the subconscious strength of associations or “*conviction*” via response times, neuroscience etc.



Our brain holds intricate **networks** of associations as the foundation for images, **feelings** and **intentions**.

An Example:
Implicit Reaction Time — IRT™ measures how closely attributes are aligned.

The faster we respond, the stronger, more **EMPHATIC** connection or higher **CONVICTION** we have for the associations.

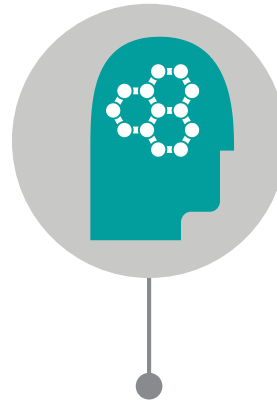
IRT™ Enhances Product Testing

By Going Beneath the Surface

Uncovers differences in what respondents report and what they feel by
MEASURING RESPONSE TIME TO QUESTIONS IN MILLISECONDS.



UnlikCaptures rational agreement



Determines the unconscious strength of associations



Captures how consumers feel about a product when they have conflicted feelings

The IRT™ Interface

Single-Item Respondent Interface



HIGH QUALITY

NO

YES

Two-Item Comparison Respondent Interface

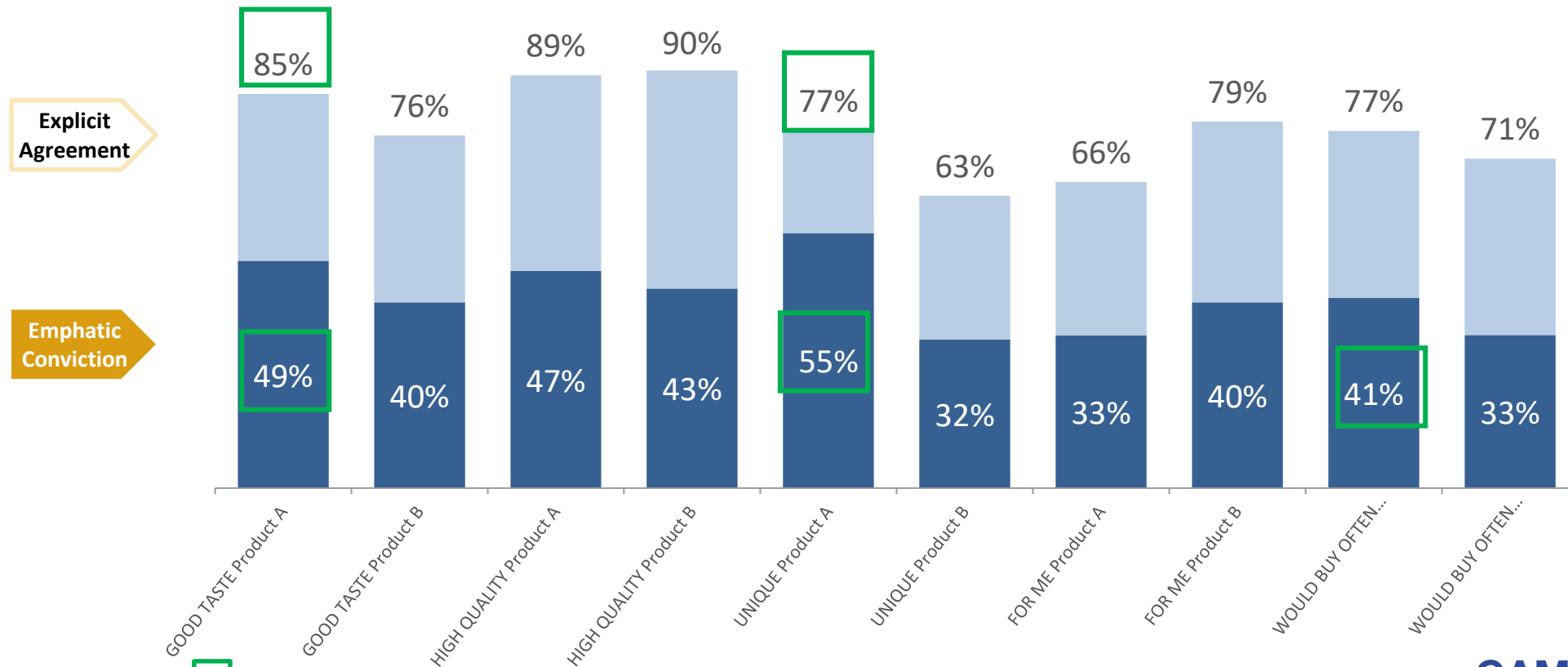
GOOD TASTE

Concept

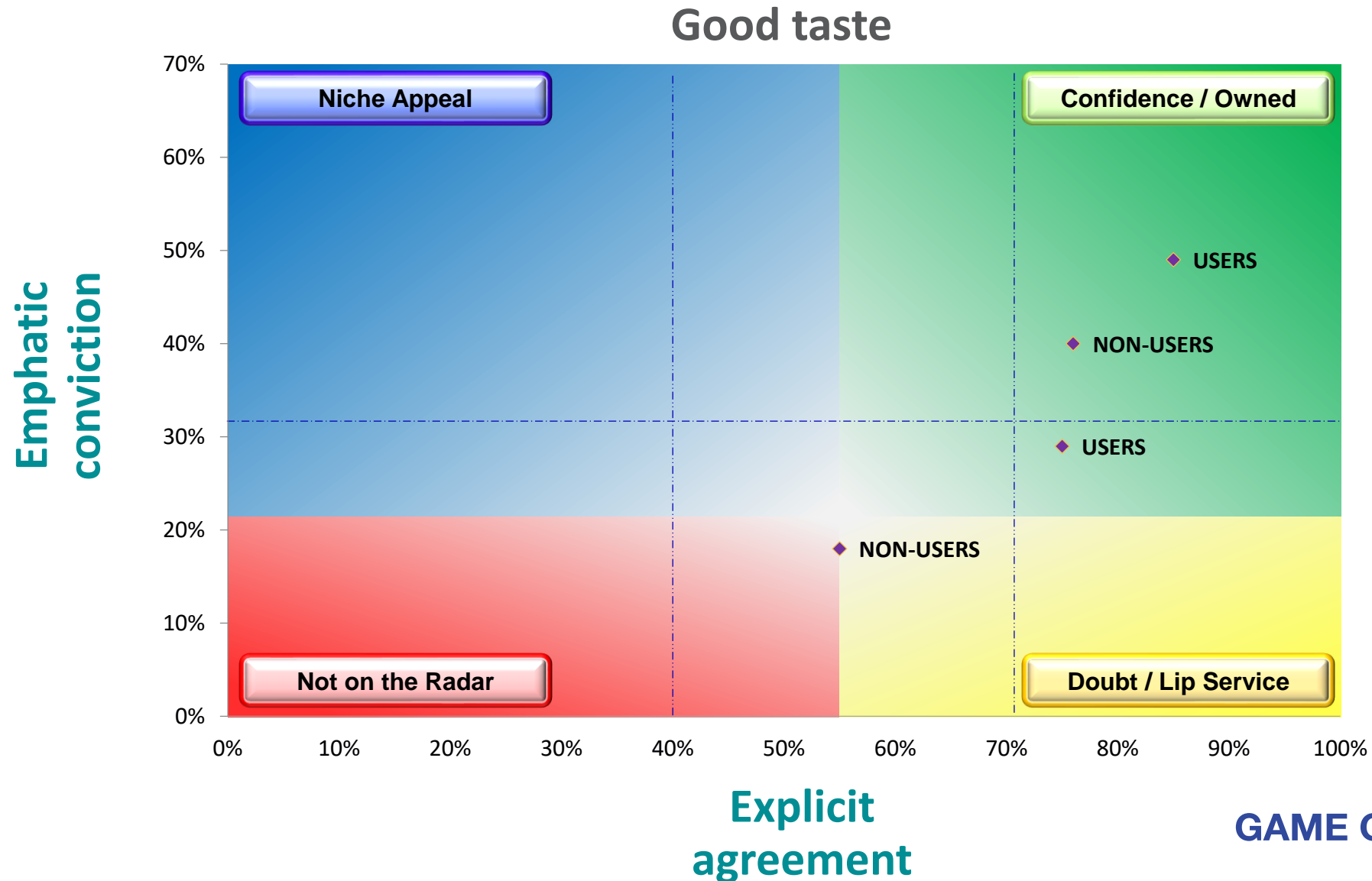


Sample Deliverables – Functional & Emotional Attributes

Product A elicits higher explicit agreement and conviction toward its **Good Taste** and **Uniqueness**. Although explicit agreement to **Buy Often** shows no significant difference between the products, there is greater conviction to purchase Product A.



Sample Deliverables



There are also other options such as the Galvanic Skin Response (GSR)



Galvanic skin response (GSR) refers to small changes in skin perspiration on the fingers.



GSR changes are driven by factors such as **intensity of emotional response** and stress.



GSR is automatic and changes without our conscious control, modulated by the Autonomic Nervous System.



Arousal or excitement is a one dimensional measure. GSR cannot indicate the valence (direction for positive/negative). Therefore, GSR should be paired with a survey or other conscious research method to gain a complete understanding of response.



GSR Case Study: Taste Space



GAME CHANGERS



Products Tested

Breyer's Oreo Ice Cream

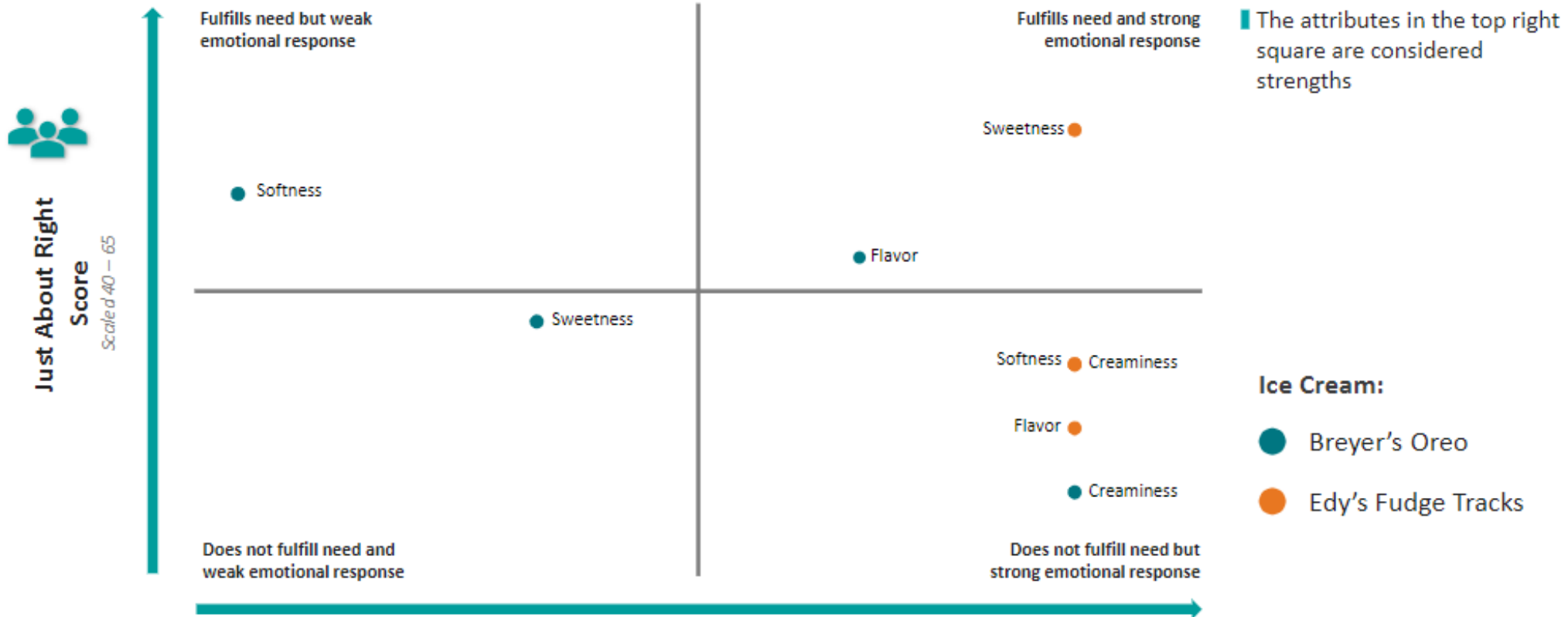


Edy's Fudge Tracks Ice Cream



Just About Right Responses

Edy's earns a key advantage on sweetness, earning a higher stated score as well as a stronger emotional response than Breyer's.



GSR Benefits and Applications

Based on the research conducted, we can conclude the following...

- Recording consumers' emotional response via GSR adds an additional layer to understanding the product performance and overall perception
- GSR enables us to understand the level of commitment and enthusiasm that consumers have with their stated responses
- GSR also helps us identify product advantages when traditional stated measures lack discrimination
- In instances of flat results between multiple products, GSR allows for another layer of analysis to contribute to strategic decision making



To conclude: our today's world requires the fusion of human and machine for better research



BENEFITS

- Improved insights
- Agile research
- Time saving
- Cost savings

Thank you! – For questions:



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