

NielsenIQ

**Find your next
Innovation:**

*Revolutionizing the
Superior Product
Development with AI*

**insight
summit**
2025

Ramesh Mishra

Global Client Leader, NIQ BASES

Victoria Letsman

Director Client Consulting, NIQ BASES

The light bulb did not come from the continuous improvement of candles

Oren Harari



Not long ago, artificial intelligence (AI) appeared to be straight out of science fiction, mostly portrayed by imaginative characters in Hollywood films



FMCG Innovation Challenges

FMCG Innovation Challenges

1. Lengthy Timelines

Traditional product development cycles take 1.5-2 years, with no guarantee of success.

2. Resource Constraints

Budget and time limitations prevent testing all prototype ideas.

3. High Failure Rates

75% of FMCG¹ innovations fail, leading to lost resources and market opportunity.

4. Market Opportunity Lost

Prolonged cycles can diminish innovation relevance and lead to missed opportunities.



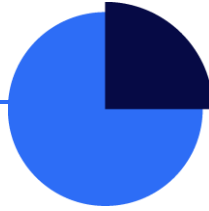
<https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/rescuing-the-decade-a-dual-agenda-for-the-consumer-goods-industry> {1}

What if



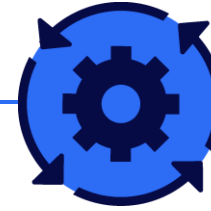
Predictive Insights

Anticipate Consumer responses before testing
Save valuable time & resources.



Market Differentiation

Instant understanding of market differences
Tailor products to specific consumer segments.



Enhanced/Optimized Designs

Design best product without expensive consumer trials
Increase probability of success.

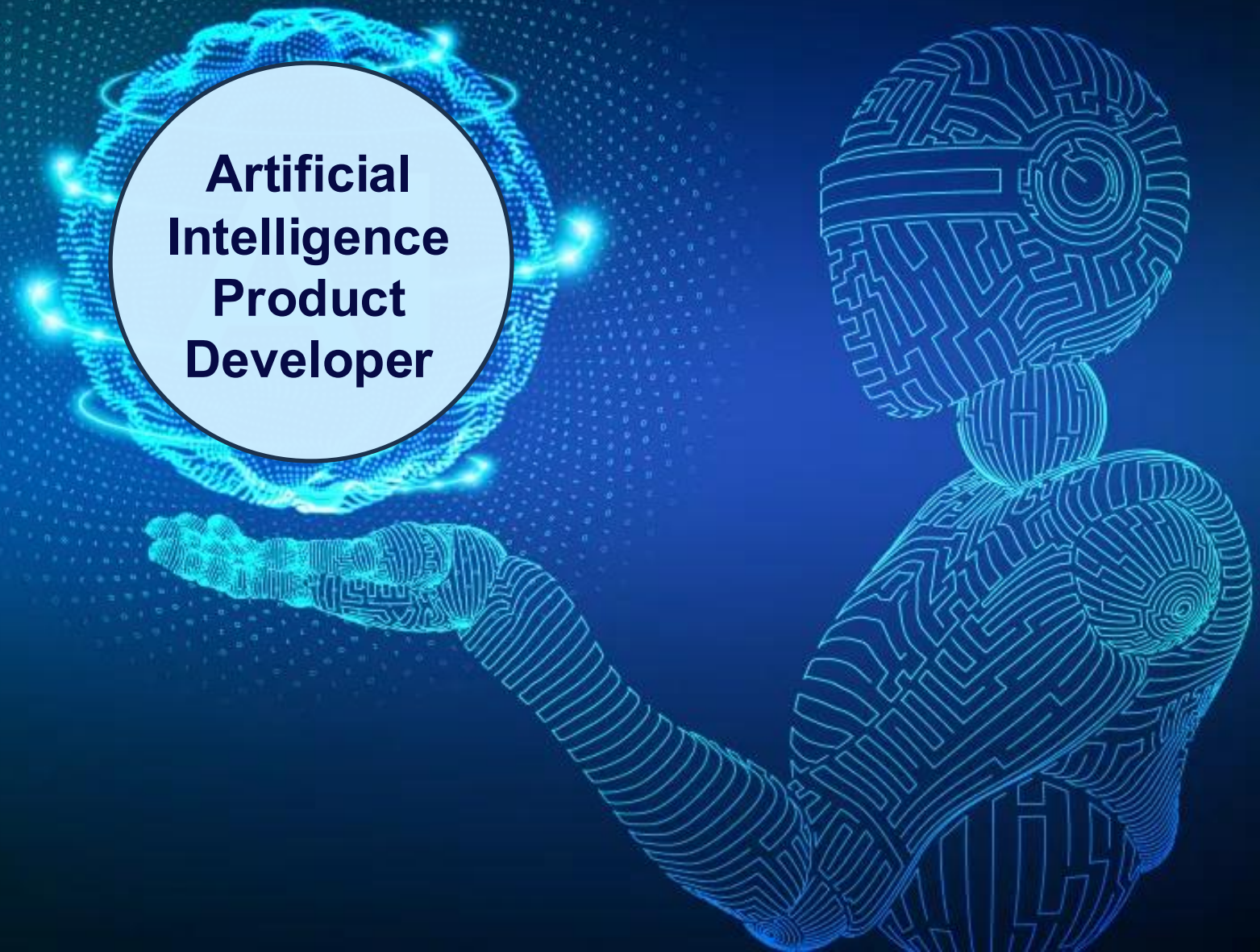


Accelerated Development

Drastically reduce cost & time for product development.
Launch innovations faster to market.

The Solution

Introducing



**Artificial
Intelligence
Product
Developer**

A Journey that began

**to revolutionize the
product development**



How AiPD Works?

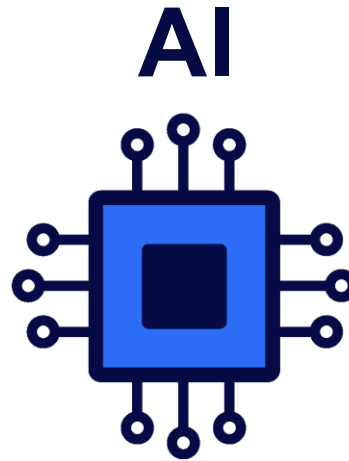
How AiPD Works?

AI engine built with the world's largest consumer sensory dataset

Pre-Built

The Global Data Collection

The Consumer Data collection



The AiPD Panellist at Sensory Labs



How AiPD Works?

AI engine built with the world's largest consumer sensory dataset

Pre-Built – Stage 1

The Global Consumer Data Collection



The Consumer Demographics

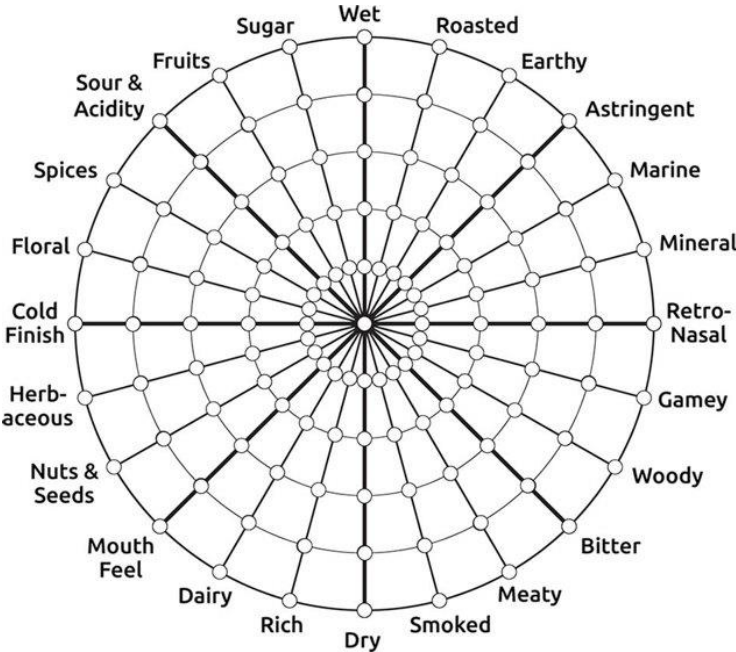
1. Age (18+)
2. Gender (males & Females)
3. AiPD database consist of key cities in 42+ markets (Urban)
 1. **China**: Shanghai, Beijing, Guangzhou cities are represented
 2. **India**: New Delhi, Mumbai, Chennai, Kolkata, Bangalore, Lucknow, Ahmedabad covered.
4. General population
5. Category users
6. Unbranded evaluation
7. **Do not consider brand users/ non-rejectors**

How AiPD Works?

AI engine built with the world's largest consumer sensory dataset

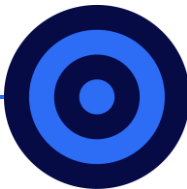
Pre-Built – Stage 1

The Global Data Collection



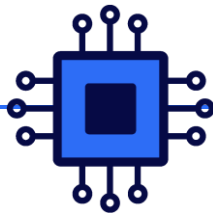
24 anchor attributes & 3500+ sensory reference attributes

The World's Largest Sensory Database



Demographic Translation Model

Built using in-market products profiling to allow translation of results between countries



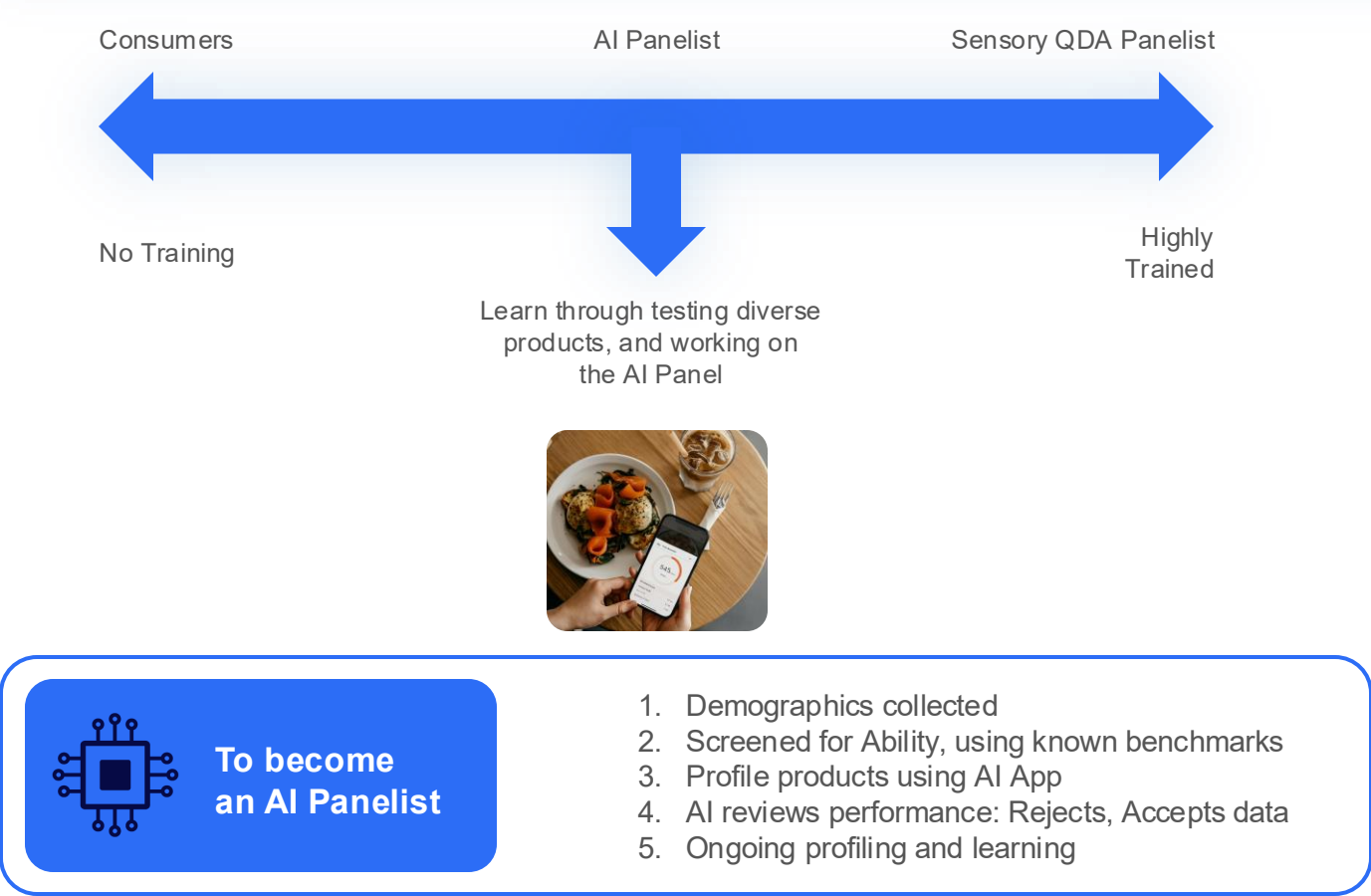
AI Attribute Model

- 60+ categories
- 20,000+ products
- 1,000,000+ consumer interviews
- 42+ markets

How AiPD Works?

Real panelist respond via the App

Pre-Built – Stage 2



The Global Sensory Facilities



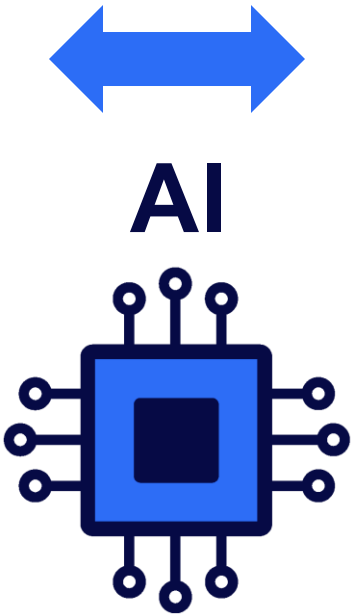
How AiPD Works?

Pre-Built

AI model the relationship between perception and preference for that specific country.

AI calibrate sensory perception at the country level, allowing for seamless translation of results across different demographics (such as gender and age).

The Consumer Data collection



The AiPD Panellist at Sensory Labs



How AiPD Works?

The Project Actions



- ~ 2-3 litre/kg samples of prototype required
- Products are served one at a time, following client-approved **usage protocols**.
- ~15-20 Assessors objectively profile the products using protocols
- Profiled on **24 anchor* attributes, used consistently across 42+ countries in 60+ categories**, which enables it to learn and translate sensory perceptions internationally.
- Anchor attributes are expanded through pre-selected **3500+ reference attributes**
- Panellists also have the flexibility to **add new reference** attributes, allowing the AI to continuously improve its library



AI Attribute Model

The collected profiling data is then input into the AI system, where **country-level calibrations are applied**, and machine learning is used to predict liking for each country

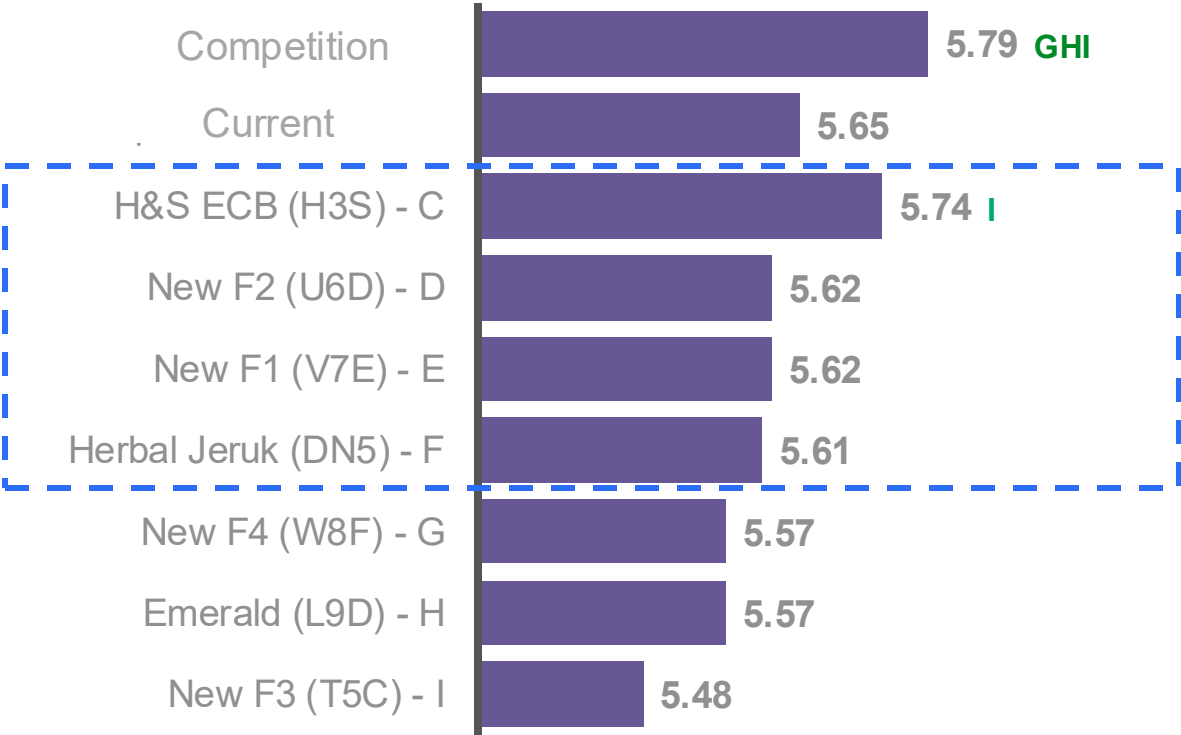
AI translates the results of profiled products and maps it on to the Country X Category cluster

Predicting consumer liking

Deliverables Screening Profiling Optimization

AiPD test Deliverables

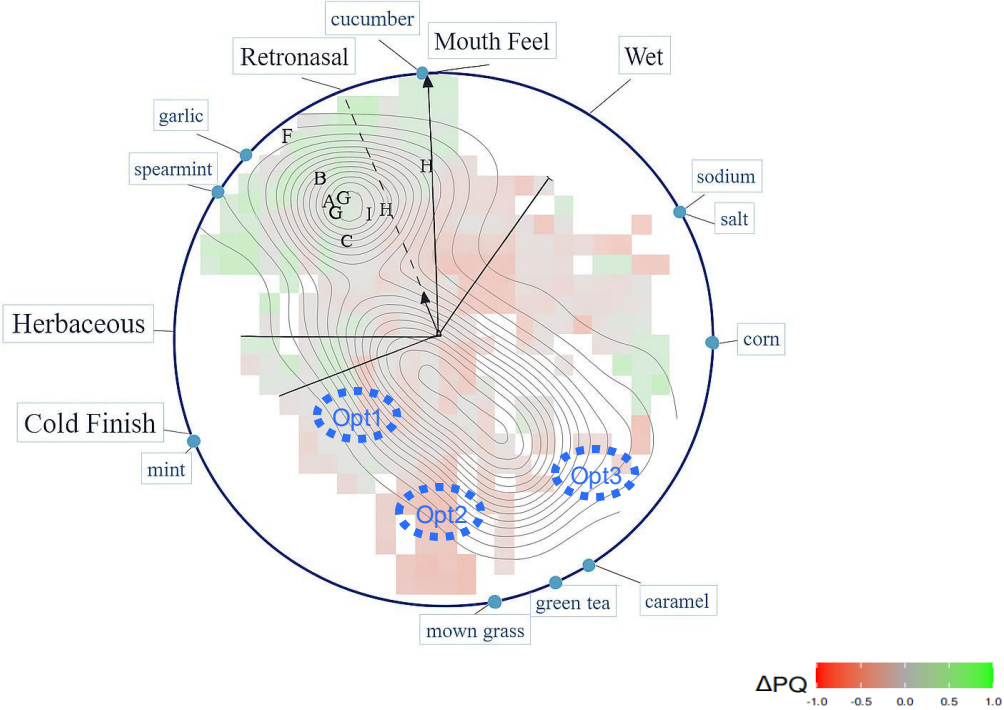
Overall AI-Liking



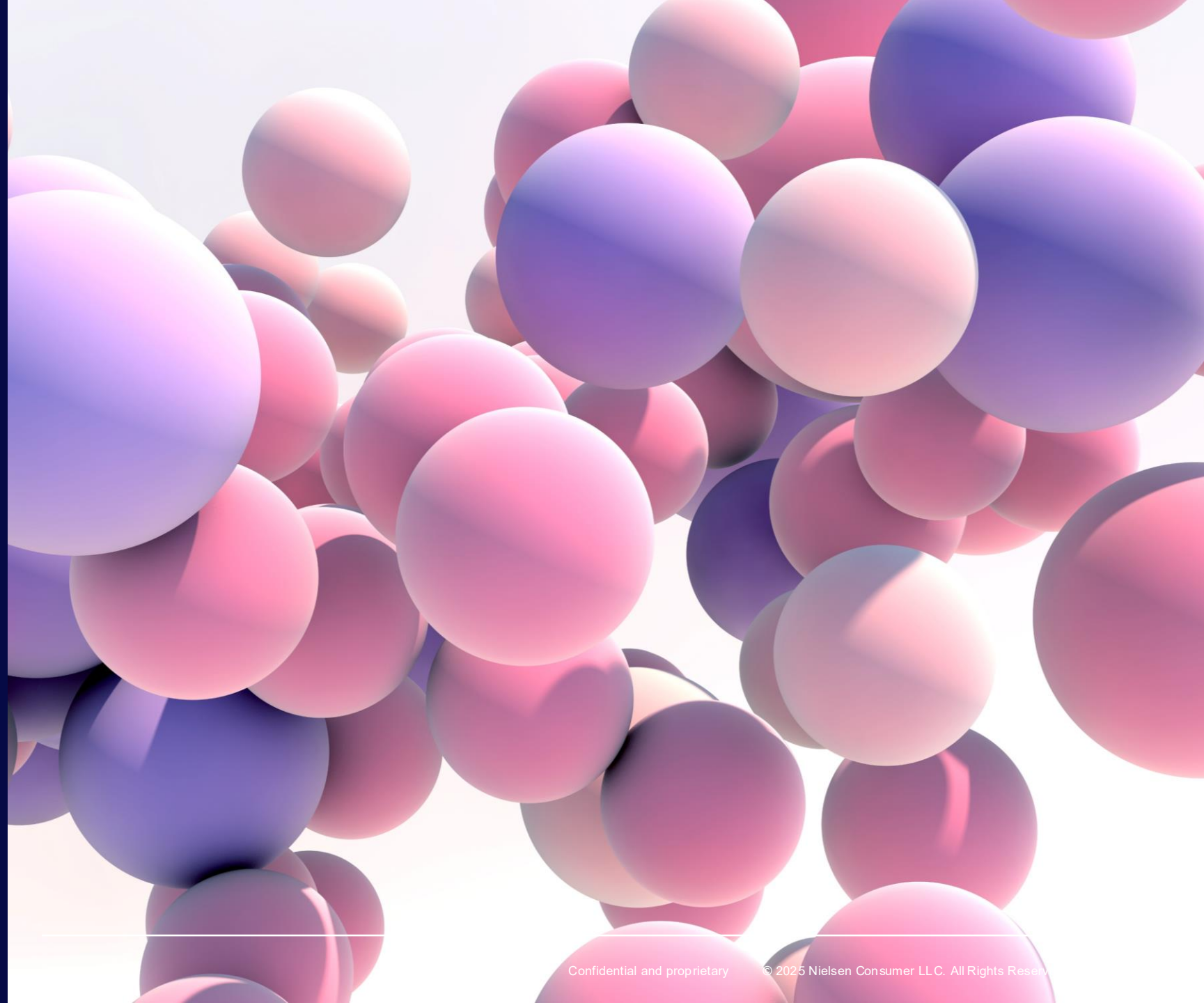
Letters next to the number indicates significant difference vs. the respective product

AI Liking (1 to 7) - A difference of 0.20 is significant @ 95% CL

Sensory Map



**Will AiPD
lead to the
same
marketing
decisions as
from
Consumer
research?**



Similar results

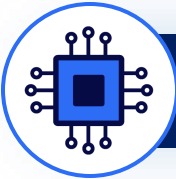
AiPD & Consumer Research leading to similar marketing decision



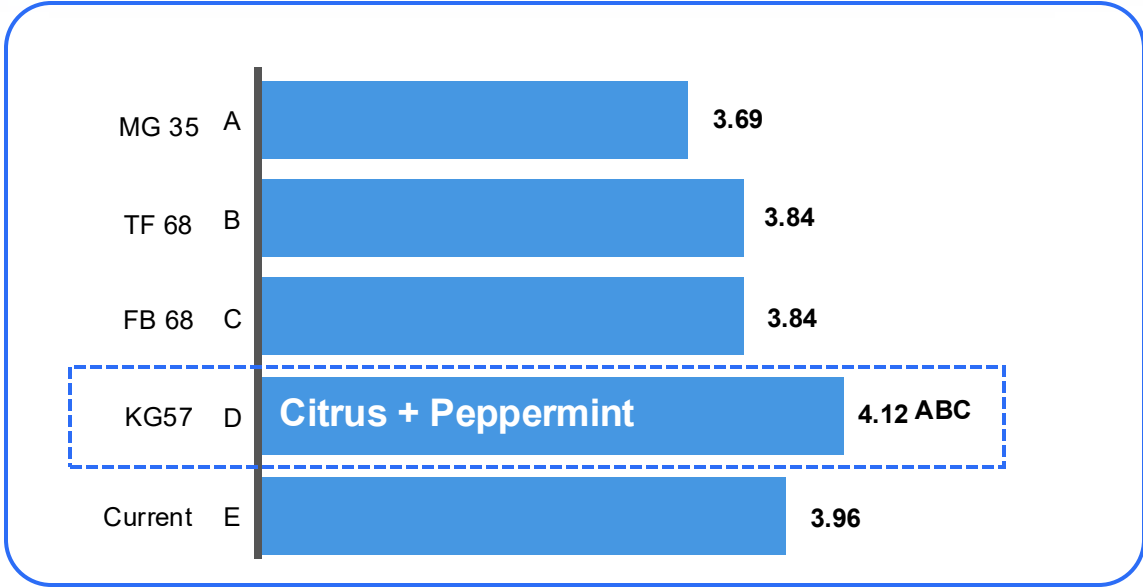
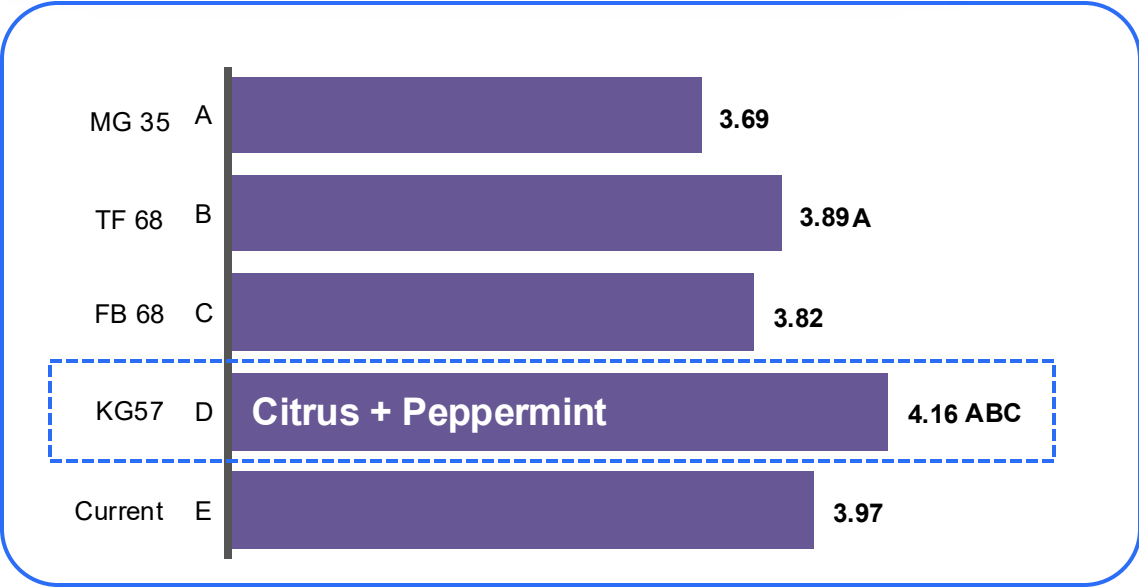
Innovation



Consumer Stated
Overall Liking (1-5)



AiPD Predicted
overall liking (1-5)

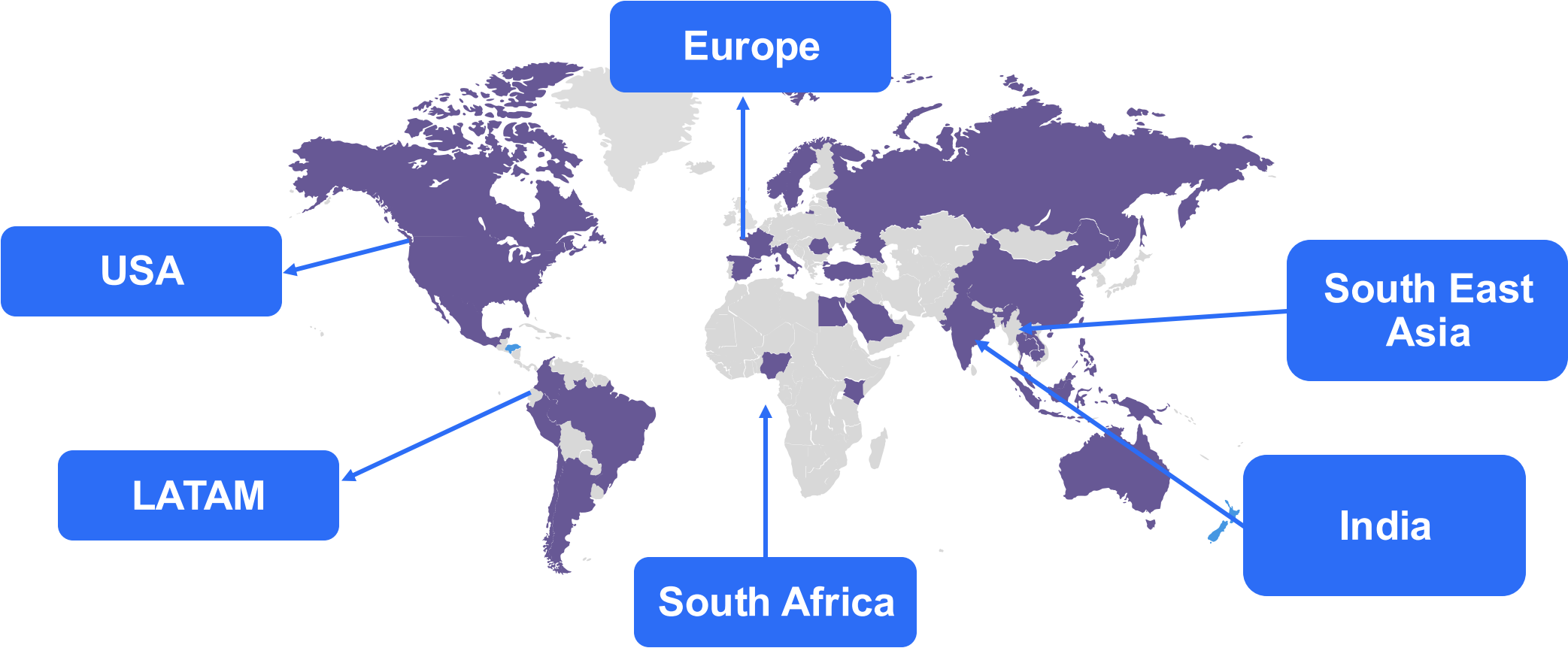


Consumer Ratings

Post-Use (1-week usage):): All stat testing at 95% confidence level A/B/C/D/E

The Impact

300+ products tested across categories



Impact on Unilever Home Care



Nuanced Insights & Actionable Diagnostics

Nuanced Insights across consumers of different countries
Offers ingredient-level comparison against market products.

Efficiency – Time & Cost, Transference

Better results with a fraction of cost & time for the program
Result Transference across markets, with fraction of cost/time of original

Test wider scope & Re-iterate

Test more options & opportunity to re-test, if need be, in a short time

Improved probability of Success

Accelerating Innovation

AI PD TESTING EMBEDDED FOR PRODUCT/FRAGRANCE DECISIONS

AiPD vs Traditional research

Aspects	Traditional	AiPD Research
Sensorial Diagnostics	Relative Evaluation	Individual Evaluation
Actionability	Limited generic attributes	Specific ingredient improvements
Turnaround Time	Months	Days
Transference	Not possible	Predictive model allows transference



Benefit of AiPD



Pre-CPT linking screen



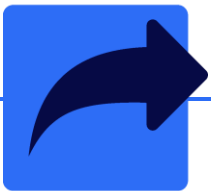
Lower product need



Agile turnaround



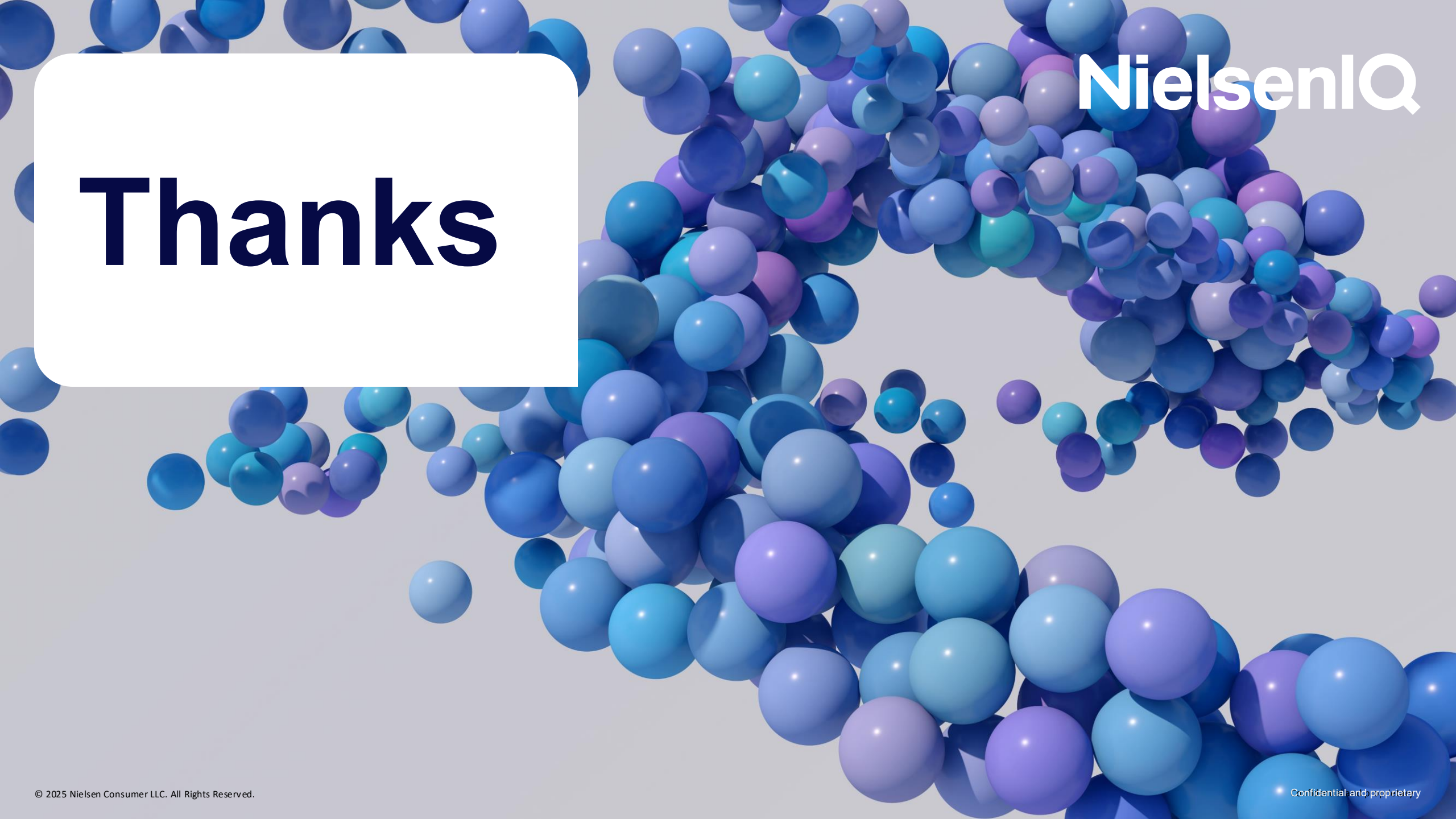
Efficient cost option



Transference



Model available now

The background of the slide is a light gray surface covered with numerous 3D-rendered spheres in various shades of blue and purple. The spheres are of different sizes and are scattered across the frame, creating a dynamic and textured effect. Some spheres are clustered together, while others are isolated.

NielsenIQ

Thanks