

Combining complementary 'Drivers of Liking' approaches to close the gap between the desired consumer experience and product and brand strategy



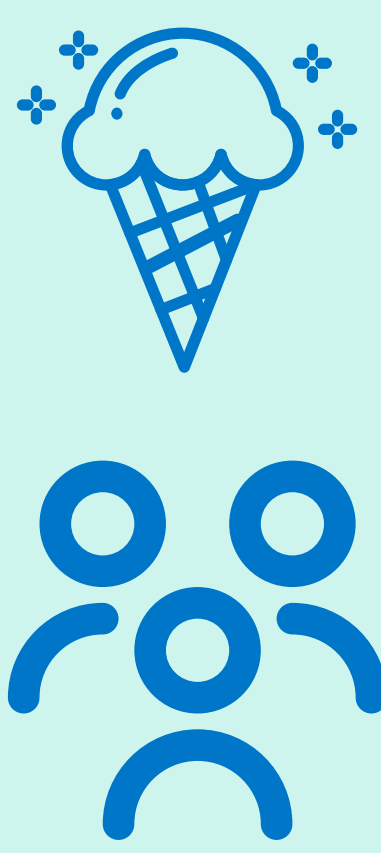
Background & Objective

When R&D and Marketing teams innovate, understanding what drives the consumer experience and satisfaction is key to successful product design. There are many tools to identify Drivers of Liking and researchers have a whole array of methodologies at their disposal – from creative qualitative solutions to predictive quantitative models.

➔ What are the pros, cons and differences between well-known methods to predict Drivers of Liking? Sensory data, Check-all-That-Apply (CATA) scores and open-ended questions.

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Test Design

A panel of 10 trained sensory assessors assessed 14 chocolate ice creams on 32 sensory attributes.

In parallel, 150 French consumers of chocolate ice creams answered questions about their expectations, liking, perception, benefits, etc. using overall liking scales, check-all-that-apply and open-ended questions.



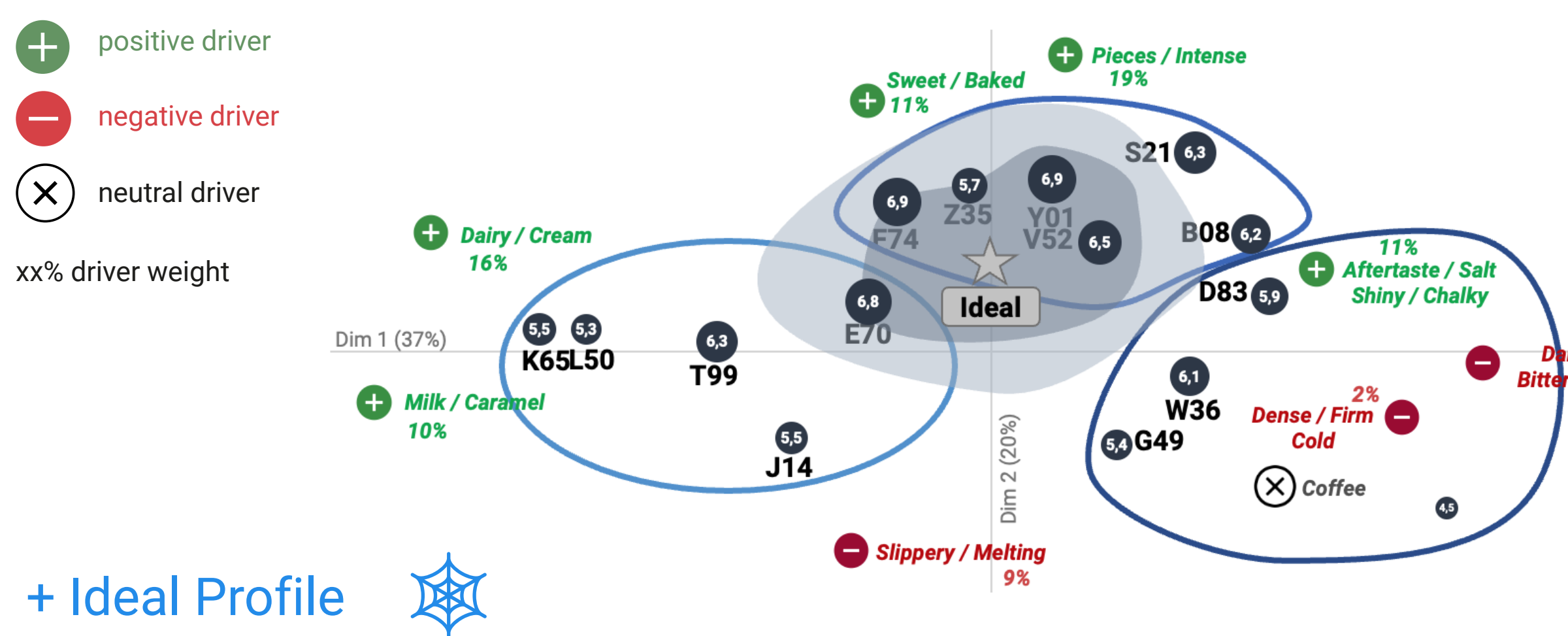
Analysis

Three different methodologies to determine drivers of liking were applied:

1. External Preference Mapping crossing Liking and Sensory measurement by a trained panel (PLS + Quadratic regression)
2. Liking crossed with CATA data (Relative Weight Analysis and PLS analysis)
3. Liking crossed with open-ended data (Relative Weight Analysis and PLS analysis)



Outputs

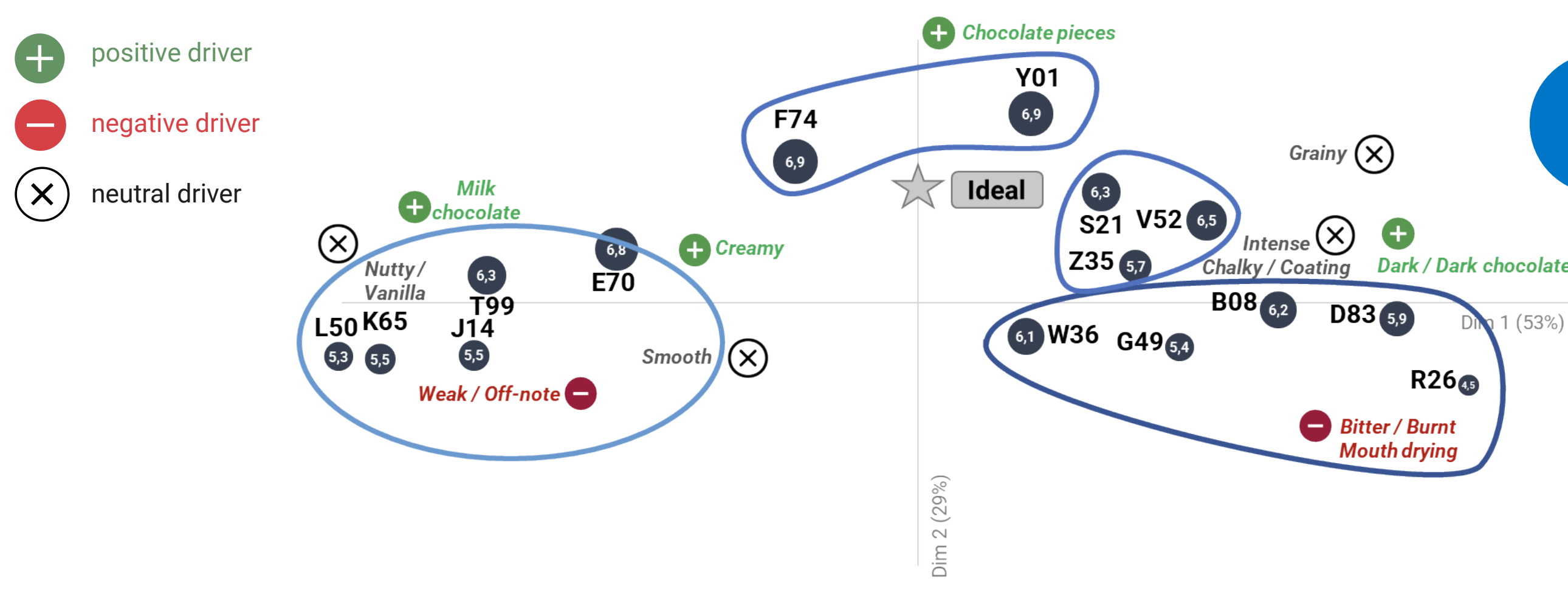


1 Liking x Sensory measurement by a trained panel

PROS ★
★ Quadratic Regression gives weighted Drivers
★ Robust
★ Precisely defined sensory target for R&D

CONS ⚠
! Time and cost

➔ Best for Product Optimisation and quantifying Drivers of Liking

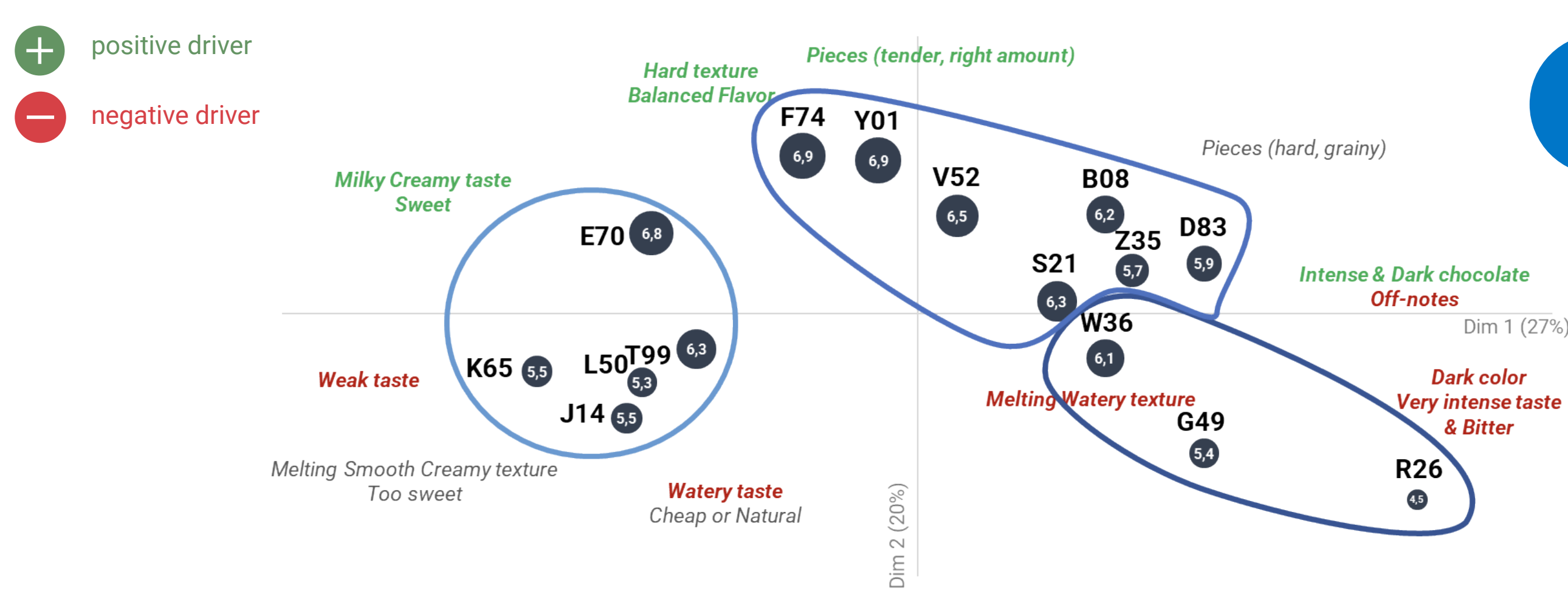


2 Liking x CATA perceptions by consumers

PROS ★
★ Provides an Ideal Target on the Product Map
★ Time and cost

CONS ⚠
! Subjective measures
! Imprecise target for R&D

➔ Best for Perceptual Drivers of Liking and screening of the category



3 Liking x open-ended questions by consumers

PROS ★
★ Uses readily available consumer verbatims
★ Time and cost

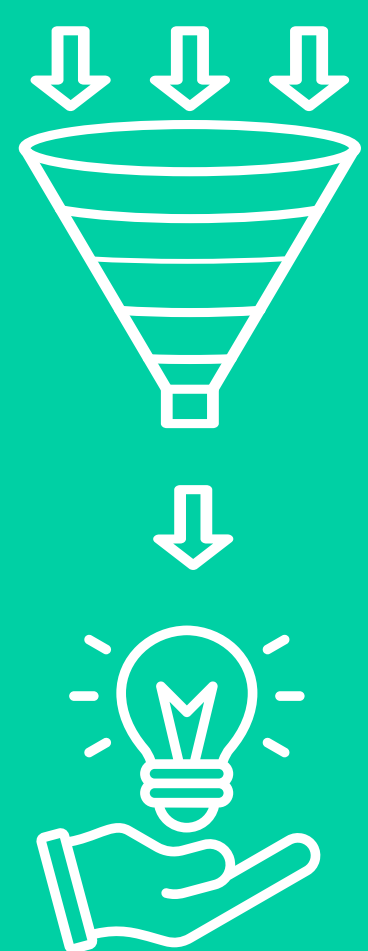
CONS ⚠
! Less robust than other methods
! Imprecise
! No development target

➔ Best for Exploration to give a macro view of the category

Learnings

All approaches give a similar perceptual map of the category, considering both product positioning and organoleptic characterisation.

1. Unsurprisingly, outputs from trained sensory assessors are the most precise and robust. The output not only gives an ideal zone on the map, but also specific targets on each attribute to define the most appreciated product.
2. From the CATA map, whilst it is not possible to define an Ideal Profile in terms of attribute intensity, qualitative drivers can be determined.
3. By analysing open-ended comments in this way their value in research is maximised to inform about the dimensions that drive consumer liking.



Conclusion

There is an effective portfolio of methods to calculate drivers of liking. The best method can be chosen depending on the level of detail and robustness required, and also taking account of other criteria such as time and cost. Future work will explore other drivers methods including Penalty Analysis, Tetraclass, Random Forest and Bayesian Network.