Sensor™

A logical and user-friendly method of selecting a brand's optimal product offerings.

What does Sensor™ do?

Identifying product improvements that drive consumer acceptance is paramount in an era where consumers have a multitude of choices. Sensor™ is our proprietary technique for identifying the product characteristics that most impact consumers' purchase commitment, allowing you to give direction to R&D for product improvements that increase interest.

Sensor™ is easily adaptable for any product test. You retain the design or the methodology and continue to ask the questions you normally ask.

- You start by identifying the critical product attributes and characteristics that could influence a consumer's interest.

- Then you incorporate a Sensory Quantification Question for each dimension into your standard product testing questionnaire.

- Sensor™ output is an Excel-based Simulator that allows you to simulate the effects of product changes on consumers' Purchase Commitment.

How is Sensor™ different?

Traditional penalty analysis relies on small samples of consumers who find a product to be "off" on a dimension—too strong in flavor or too weak in aroma—and computes how much of a penalty these consumers assign to their overall product evaluation compared to consumers who feel the product is "just right" on this dimension. Sensor™ uses Sensory Quantification Questions to elicit all consumers' product evaluations. These questions are straight-forward and incorporate a "hidden" scale which the consumer doesn't see, and so is not fixated on the actual "value" assigned to the product for any characteristic.

Sensory Quantification Questions are asked for all relevant product characteristics, covering aspects of taste, texture, aroma and appearance, for example.

Please use your cursor and click the spot on the line below to indicate the sweetness level of the product.
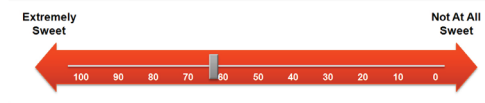

Sensor™ is easily adaptable for any product test.

Sensor™ employs micro-modeling to deliver a Drivers of Purchase Commitment model to gauge the effects of product changes on consumers' interest. For example, if a product's sweetness is increased such that all consumers would increase their evaluation of sweetness by 20 points, what would be the impact on Purchase Commitment from the new distribution of consumer evaluations?
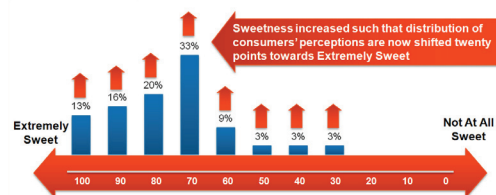
The key output for Sensor™ modeling is an Excel-based Simulator you use to vary attributes individually or in tandem with other attributes and read the effect on Purchase Commitment.

Purchase Interest Increases from 41.7% to 58.9%!
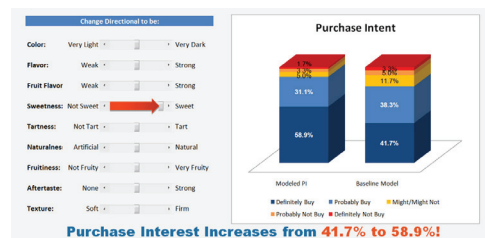
We could see the impact of increasing sweetness (shown above) or the impact of both increasing sweetness and decreasing tartness. »

Why use this approach?

Sensor™ micro-modeling allows us to take into account:

- Each respondent's after-use Purchase Commitment
- Each respondent's evaluation on each attribute
- Each attribute's impact on Purchase Commitment

From this modeling, we determine how critically each product characteristic impacts Purchase Commitment and, specifically, which changes to product characteristics will positively impact consumers' interest.

The result: actionable recommendations to R&D for product improvements that make a difference.

When should you use Sensor™?

Sensor™ is applicable to any product test where you need to understand potential areas for improving products: new products, cost reductions, product improvements and competitive benchmarking.

Adding Sensor™ to your product test allows you to identify the critical product dimensions which really drive consumer interest. You can model the effects of product changes to any attribute—individually or in combination—and recommend targeted directions for product enhancements that lead to stronger purchase commitment.

If you'd like to include Sensor™ in your product testing protocol, or would like to see how Sensor™ could aid you in better understanding consumers' perceptions of your products, give us a call.

Case study

Snack anyone?

A client was developing new flavors of a snack cup and wanted to understand what product improvements might foster greater consumer acceptance. Drivers of Preference indicated that overall flavor, the specific snack flavor and sweetness were the principal factors behind consumers' product preference. Penalty analysis suggested that weak overall flavor, weak specific snack flavor and a lack of sweetness were inhibiting consumers' product evaluations.

Sensor™ modeling demonstrated that while heightening sweetness would lead to greater purchase interest, increasing the overall flavor and the specific snack flavor would actually decrease purchase interest. The directions for impacting purchase interest were to improve the naturalness of the product's flavor and eliminate the product's aftertaste, both of which were seemingly "minor" issues based on traditional analyses.

Our guidance to R&D was for them to focus on these two key flavor dimensions. ●