An Approach to Integrate

Long Term Behavioral

Measures to Identify

Opportunities for New

Products

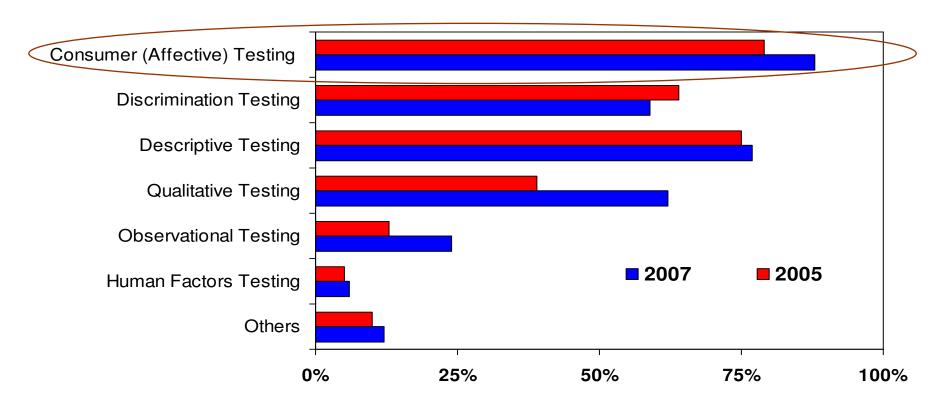
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Society of Sensory Professionals Conference, Cincinnati OH



### Consumer (Affective) Testing

#### Q: Which of the following methods do you use most often?



Source: A biennial survey conducted by It! Ventures LLC and The Understanding & Insight Group LLC to understand the changing role of the Sensory Professional.

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### **Consumer Testing – Traditional Approach**

- Central location testing (CLT); Home use testing (HUT)
- Hedonic measures: liking, purchase interest, and/or stated preference
- Success criteria (from the sensory standpoint):
  - Average liking > benchmark score
  - Higher stated preference or liking compared to competitors



### **Consumer Testing – Traditional Approach**

- Despite their popularity and usefulness, we questioned whether these measures are good enough and give us answers we need
  - How is the benchmark score defined?
    - What happens if there is no benchmark (e.g., for "new to the world" products)?
  - How do we incorporate tradeoffs consumers may be willing to make?
  - Do these measures reflect actual behaviors?
  - Do we know why consumers want the products? What benefits do consumer gain from using the products?



### **Extended Use Consumer Panel**

- Capture and track behavioral measures (in addition to hedonic measures)
  - Product choice selection
  - Product usage
- Engage with consumers to understand the product experience



### Setup: Extended Use Consumer Panel

## Product Introduction Session (Wk1)

Familiarize through product trial and interact with others (particularly for "new to the world" product)



Weekly Free Choice Selection and In-Depth Interviews (4-5 Wks)

Develop and identify users. Understand early-stage product experience and adoption



Ongoing Product
Testing (CLT/HUT) +
Free Choice Selection.
Periodic in-depth
interviews

Understand changes in product experience and behavior over time

#### **Key Measures:**

- Initial interest or barrier to trial
- Product feedback based on initial trial



#### **Key Measures:**

- Choice selection
- Usage
- Product experience
- Product feedback



#### **Key Measures:**

- Liking rating
- Product feedback
- Choice selection
- Usage
- Product experience

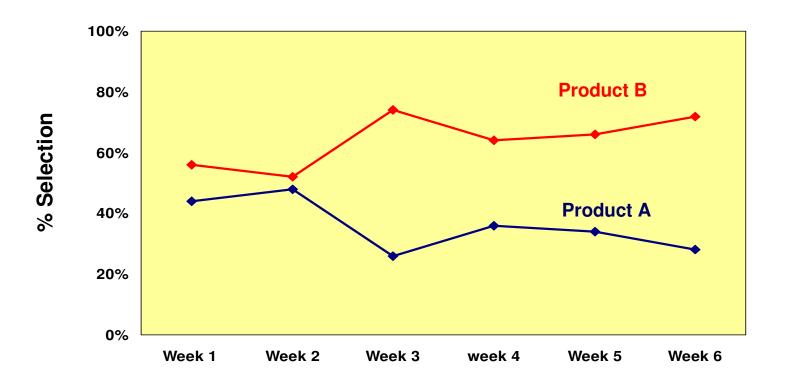


### "Product Choice Selection"



## Tracking product choice selection helps assess sensory performance over time

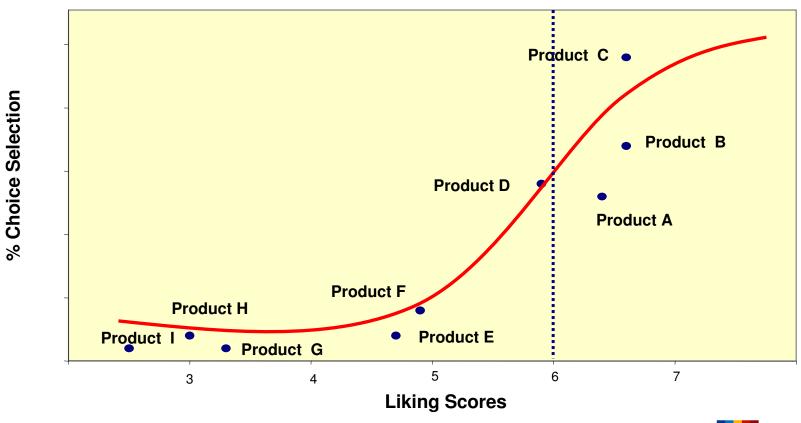
• Initially, both products perform similarly. Tracking product choice over extended period indicates that **Product A** outperforms **Product B** over time.





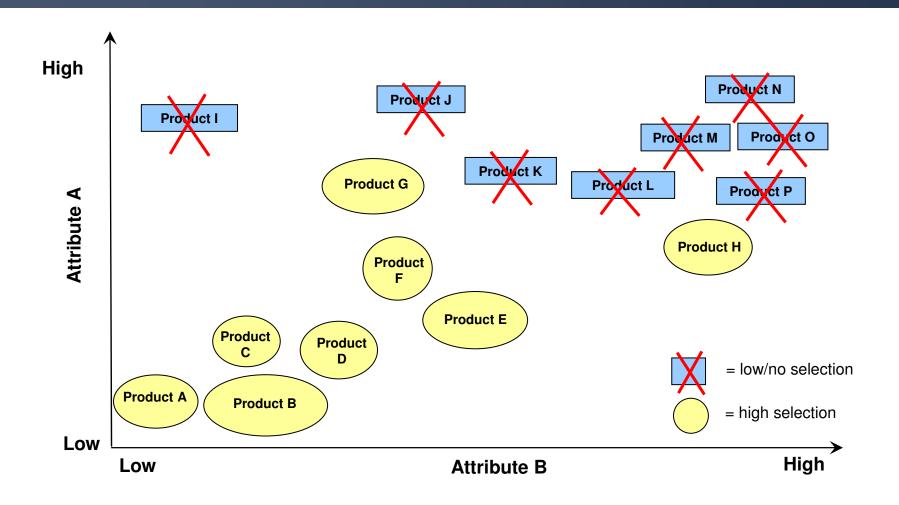
## Tracking choice selection also helps bridge the liking measure to actual behavior

• This approach allows us to connect the liking rating to actual behavior. In this case, we determine to use %6 and 7 liking rating as a proxy for highly acceptable products.





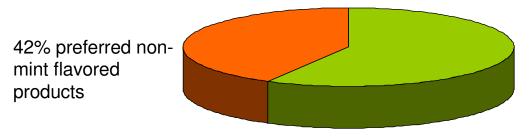
# Product choice selection can be used to identify desired level of key sensory attributes





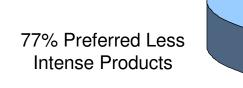
## Tracking product choice selection also helps identify consumer segments based on product preference

#### **Flavor Preference**



58% preferred mint flavored products

### Preference Based on Sensation Level



23% - Sensation Seekers

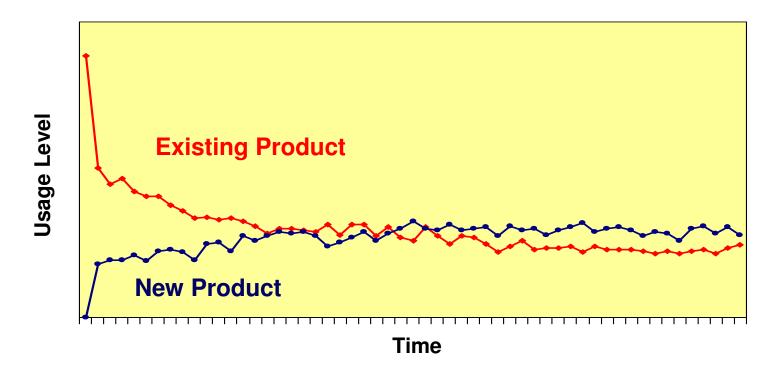


## "Product Usage"



## Tracking product usage helps assess short term and long term product performance

- Understand how long it takes for consumers to incorporate the new product to their life
- Assess the impact of new product usage on current product





## "Product Experience"



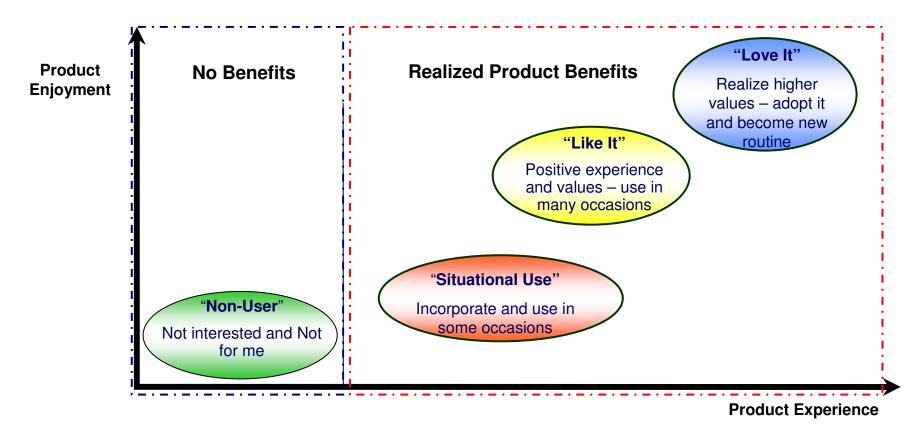
### **Product Experience**

- Whole product experience = Linking product attributes to benefits (functional or emotional) to values
- Understanding product experience is critical particularly for new product
  - Why would consumers want or need this new product?
  - Why would consumers choose to use this new product?
  - What benefits do consumers gain from using this product?



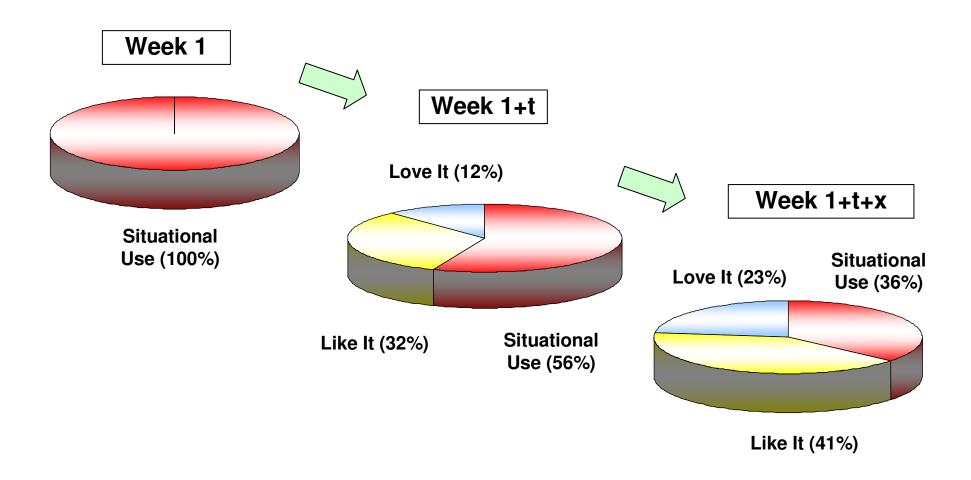
## Assessing overall product experience allows us to identify potential consumer segments

• Through stories consumers share with us regarding their product experience, we can identify different consumer segments.





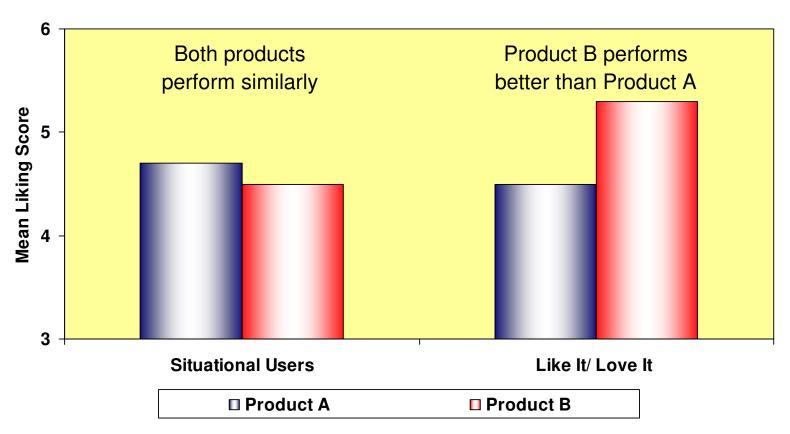
# Tracking product experience reveals that these consumer segments can shift over time





# Understanding consumer segments helps us identify alternative approach to assess product acceptance

• The more interest and excitement with the product, the more discriminating and selective.





### Factors to Consider with Extended Use Consumer Panel

#### A learning laboratory

- May not perfectly predict real marketplace performance
- Learnings and insights should be used to form hypotheses that can be validated when products are launched

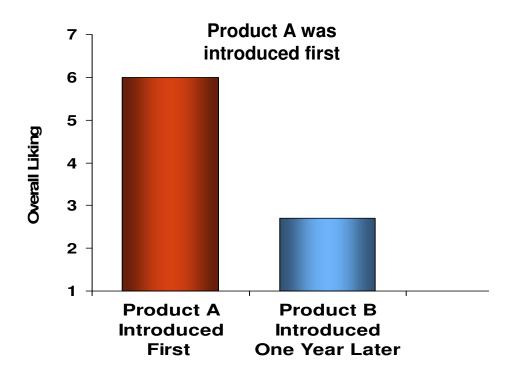
### Product adoption - response bias

- Once a product has been introduced and adopted by consumers, other products tend to be less acceptable
- Consider shortening the length of panel to 3-4 months



# "Product Adoption – Response Bias" can be found in the Extended Use Panel

• Once consumers develop preference for a certain product, they tend to rate that product higher and rate other products lower in liking.





### Summary

- Extended use consumer panel offers an opportunity to integrate behavioral measures in addition to hedonic measures
  - Choice selection
  - Product usage
- Offers different views to assess product acceptance, short term vs. long term performance
- Gain deeper understanding of consumer product experience to assess likelihood of product success

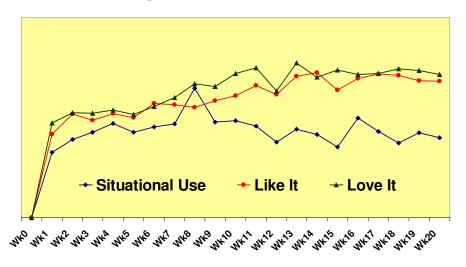


## Backup

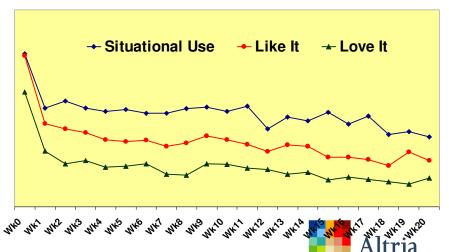


## Different consumer segments have different patterns of usage/consumption

### **Increasing Trend of New Product**



### **Declining Trend of Existing Product**



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## Additional insights can be gained from observing consumer responses to the product over time

- Examples:
  - Product adoption Response Bias
    - Once a product has been introduced and adopted by participants, other products tend to be less acceptable
  - Sensory segments exist based on flavor and taste preference
    - Participants can be grouped based on their sensory preference. We use different groups to assist the development of different products

