

Noldus



Observing Consumer Behavior: Past, Present, and Future

Introduction



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Observing Consumer Behavior: Past, Present, and Future

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Overview

- » Who is the consumer?
- » Why study consumer behavior?
- » How do we study consumer behavior
 - Surveys, forums, focus groups
 - Observational / Ethnographic studies
 - Rational thinking vs. emotional reaction

Past methods
Current focus
Future technologies



Greater market share
Higher sales
Happier customers

Who is the consumer?

Individual, or group, who selects, secures, uses, and disposes of products, services, experiences or ideas to satisfy a need(s).

» What do we want to know?

What is purchased?

Why?

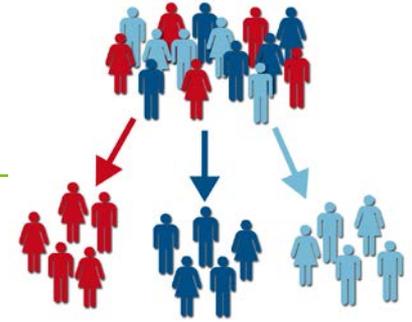
When and where?

How is it used?

How often purchased?

Satisfaction?

Segmenting the consumer



- » Why is this important?
 - You must know who to recruit/observe in order to:

Meet the needs of a specific market

Accurately target that market

Get your message to that market

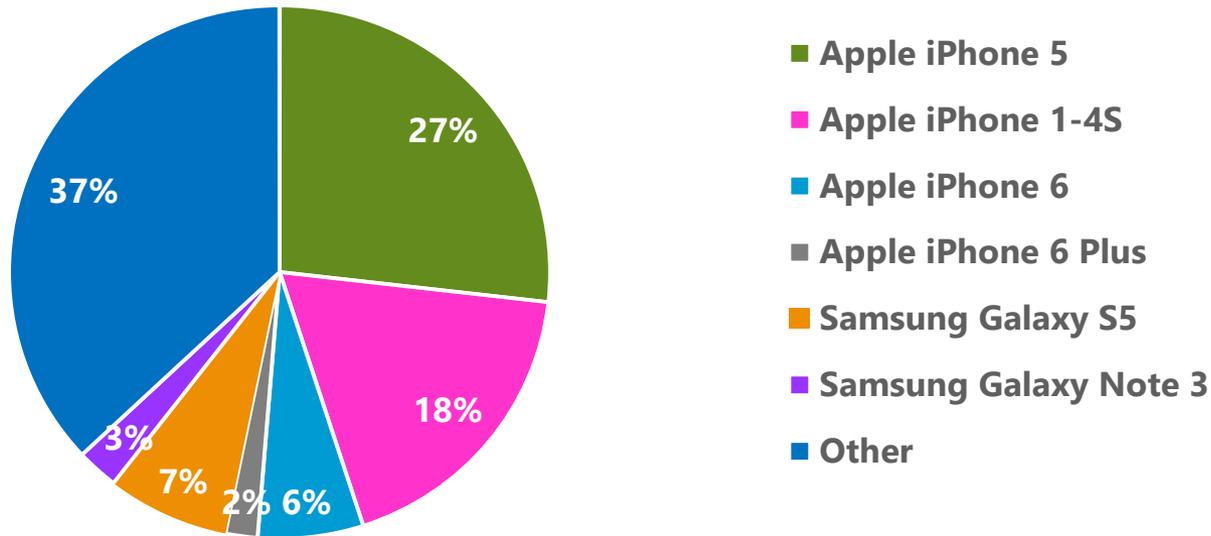
Be appealing to that market

Continue to appeal to that market

Why study consumer behavior?

- » Today, more than ever, consumers are presented with MANY options.

January 2015: Top Apple and Samsung Phone Models (based on web traffic)



- » How do you stand out from the crowd?

Fill a need!

» Maslow's Hierarchy of Needs

Products

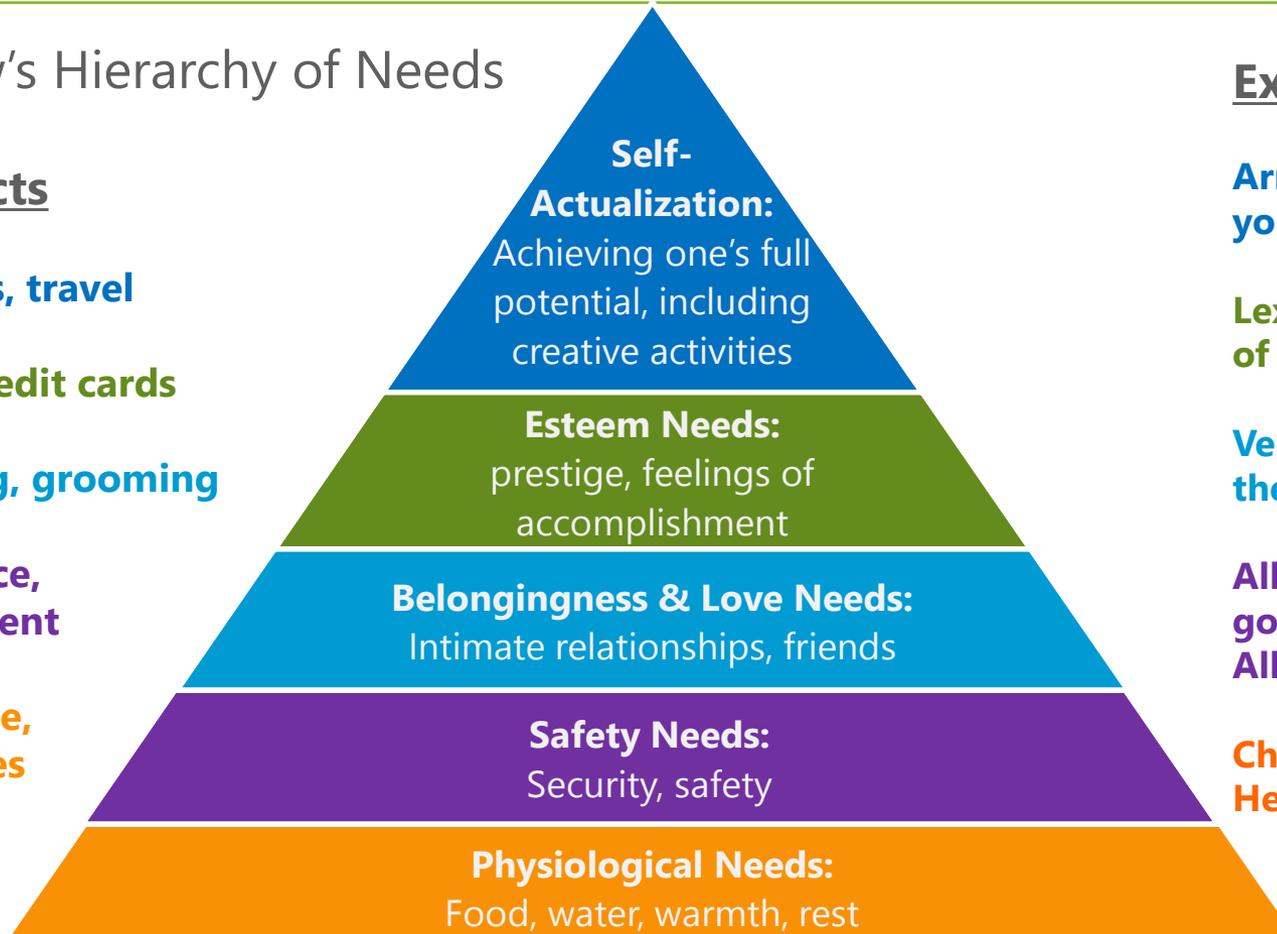
Hobbies, travel

Cars, Credit cards

Clothing, grooming

Insurance,
Retirement

Medicine,
Groceries



Examples

Army: "Be all that you can be"

Lexus: "The pursuit of perfection"

Venus razors: "Reveal the goddess in you"

Allstate: "You're in good hands with Allstate"

Cheerios: "Bee Heart Healthy"

» Marketers can focus advertising appeal on specific needs shared by large target markets

» A product can fill more than one need

How do we know what the consumer wants?

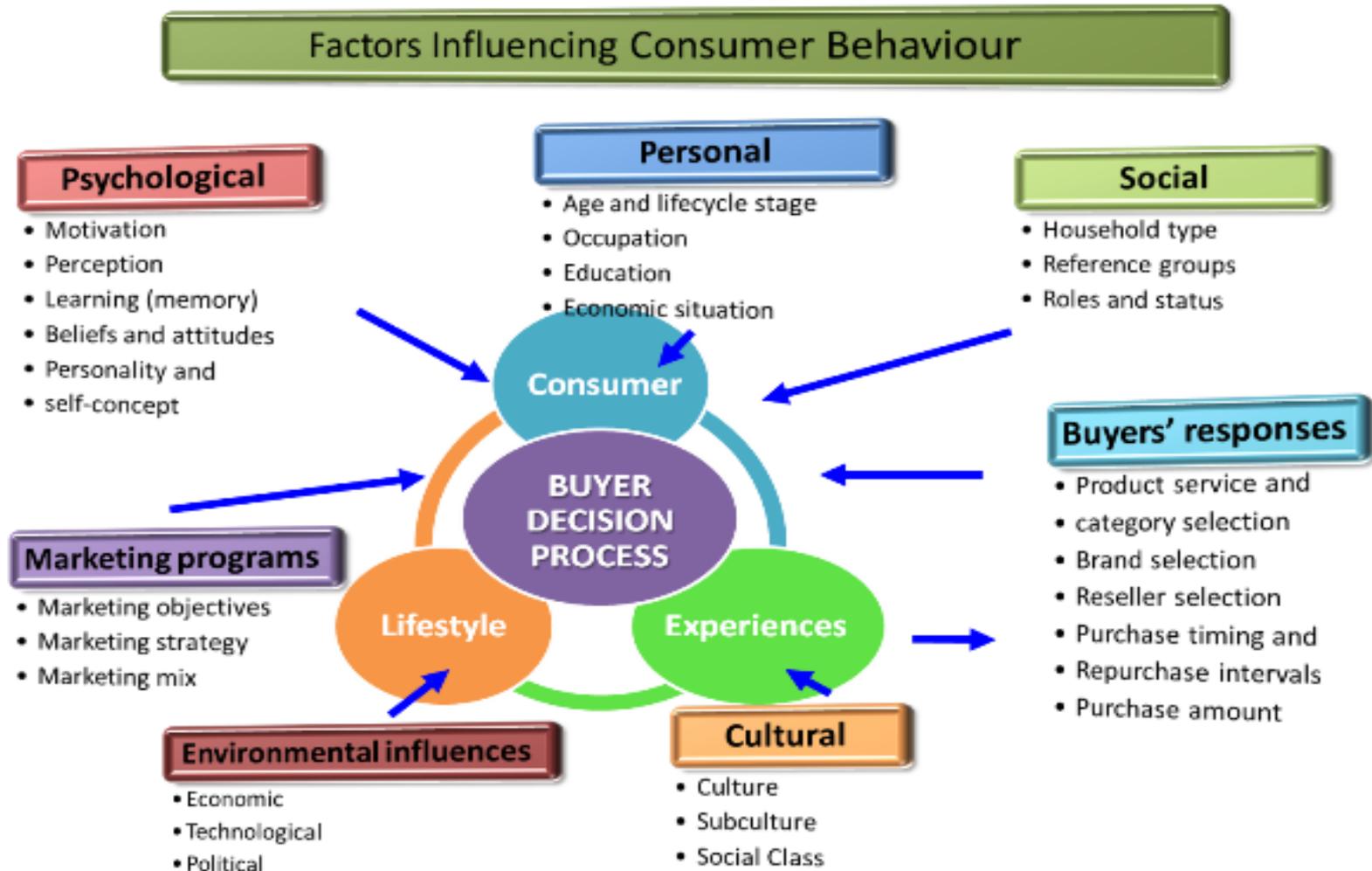
- » Need to study behavior!

Consumer Behavior:

ALL activities undertaken when **obtaining**, **consuming**, and **disposing of** products and services

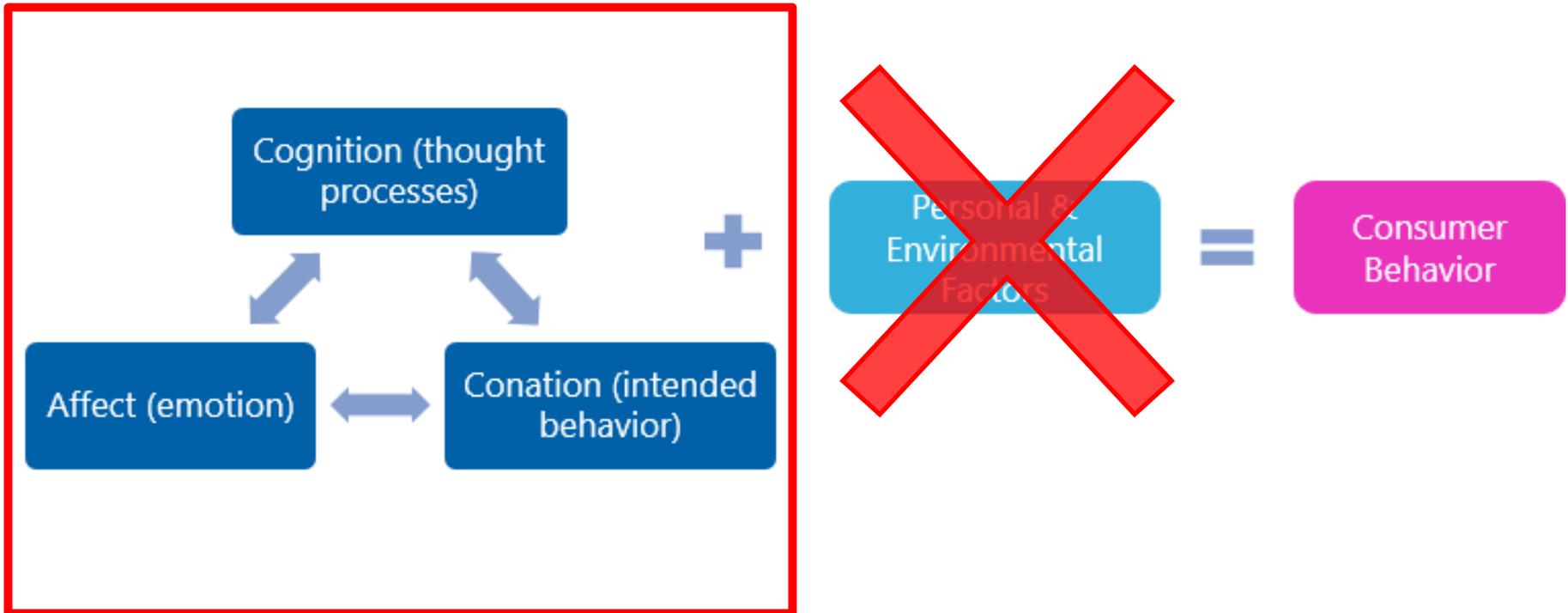


What factors affect the consumer?



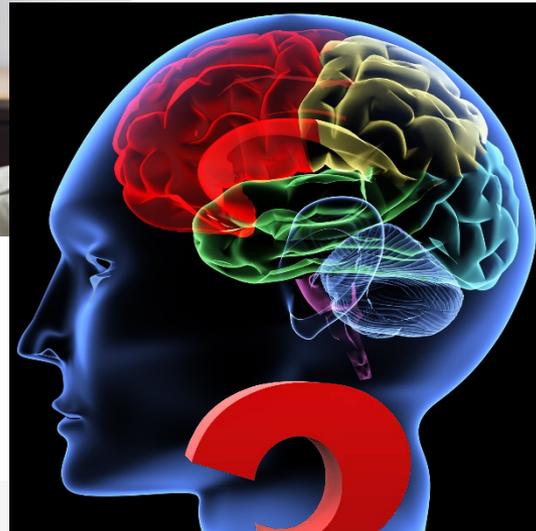
How do we know what the consumer wants?

» Need to study behavior... Modified.

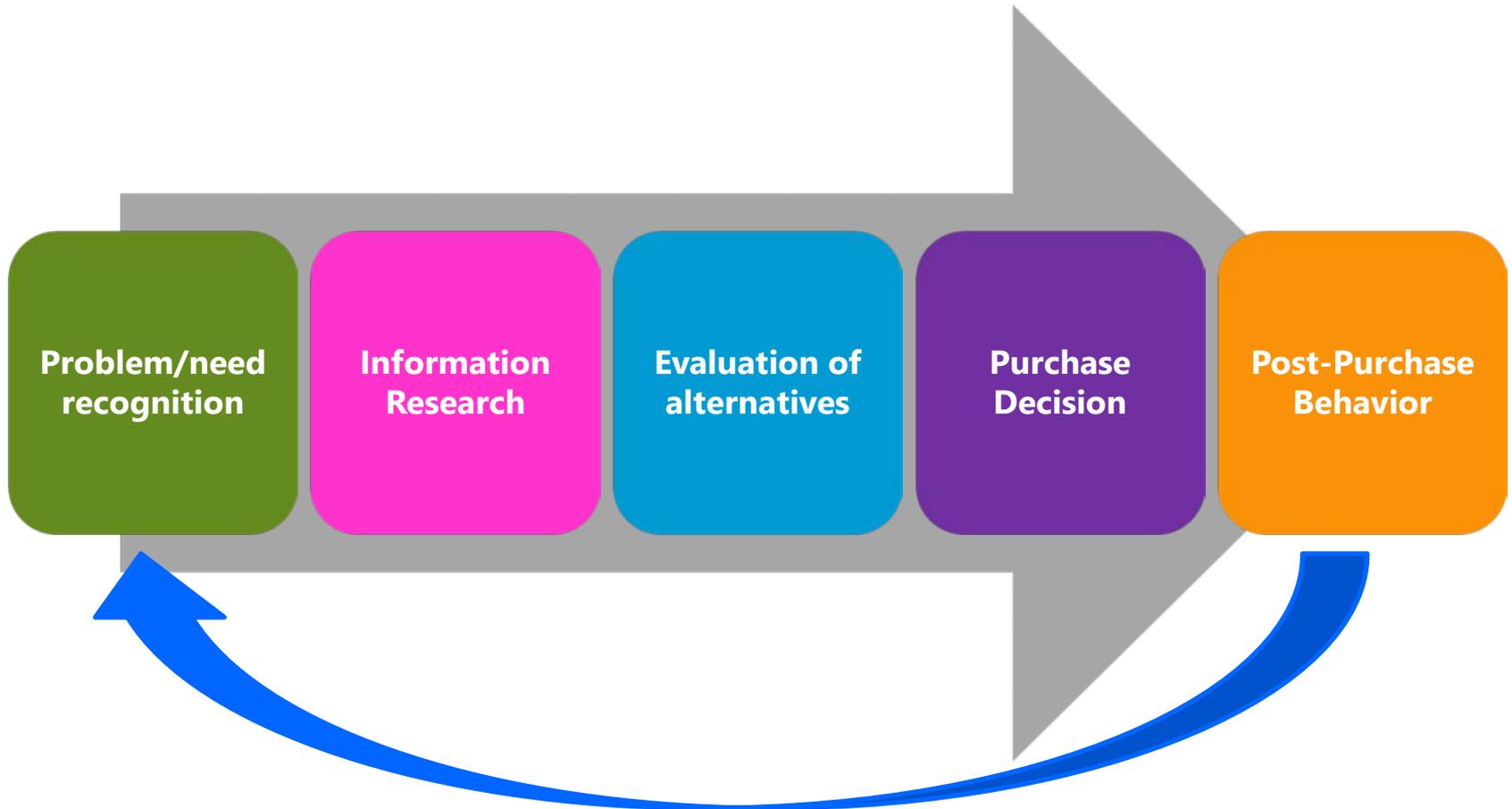


3 aspects of consumer behavior

1. Thought processes/reaction
2. Intended behavior
3. Affect/emotion



Cognition – The Buying Process

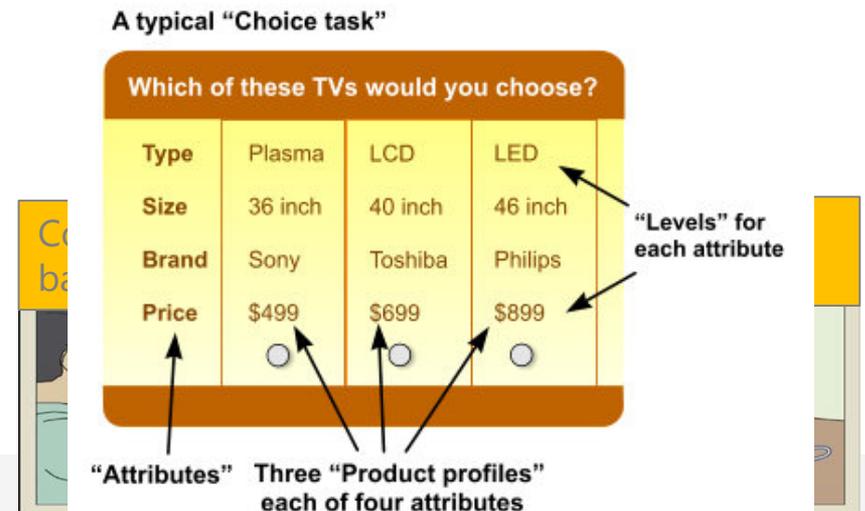


Why do we measure consumer thinking?

- » Why do we care what people think?
 - They can tell us
 - Cheap and easy

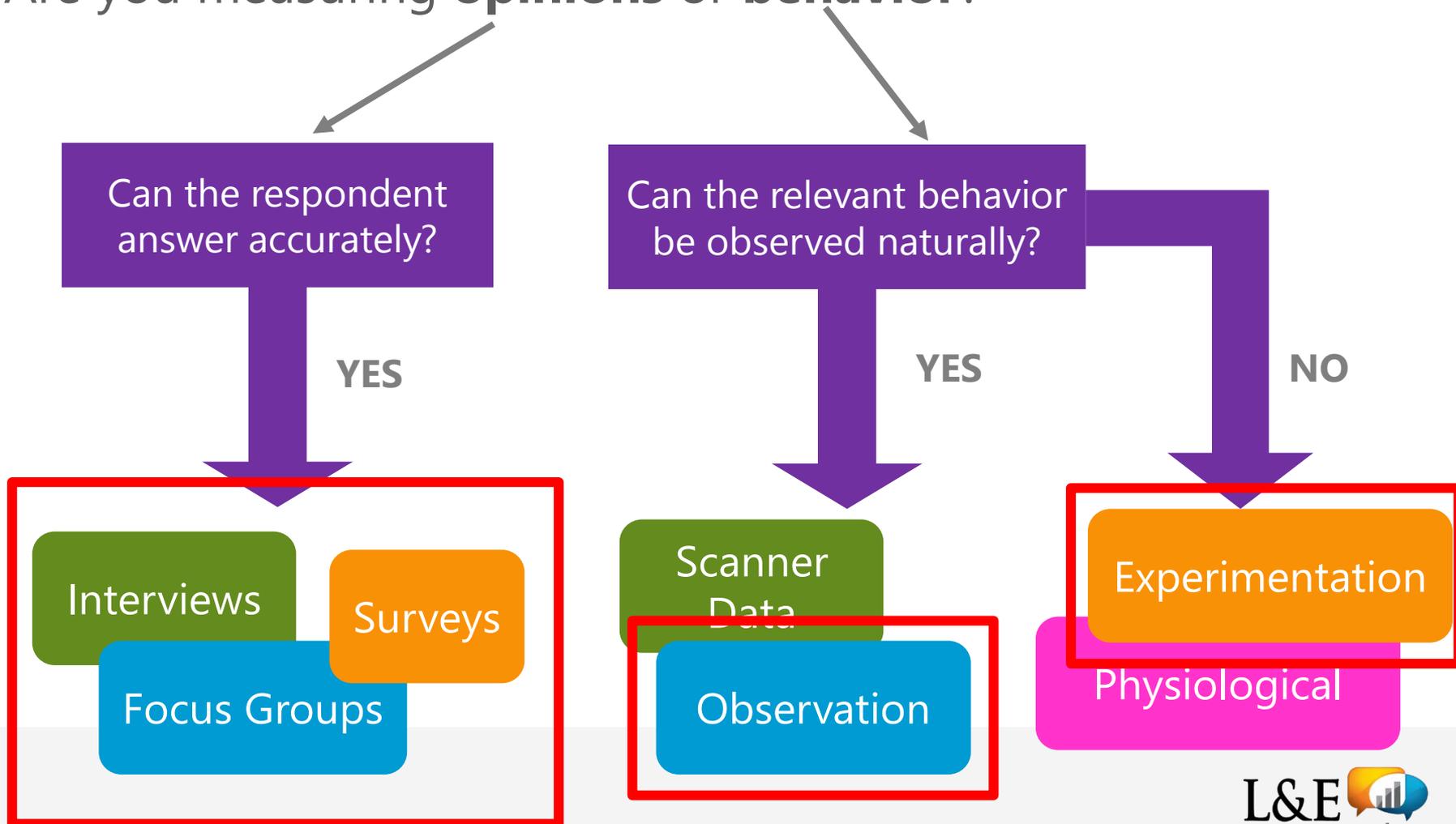
How do we measure consumer thinking?

- » Empirical knowledge
- » Conjoint / Discrete Modeling
- » Implicit Association Test (IAT)
- » Data – numbers!
- » Survey



How do we gather data on consumer thinking?

» Are you measuring **opinions** or **behavior**?



Measuring opinions

Surveys – Focus Groups - Interviews

» Surveys

Pros	Cons
<ul style="list-style-type: none">• Gather a lot of data• Reach many respondents• Inexpensive	<ul style="list-style-type: none">• What do you do with the data?• Need a lot of respondents• Low response rates• Very susceptible to bias

Often, people do not know why they feel the way they feel!

Measuring opinions

Surveys – Focus Groups - Interviews

» Focus Groups

Pros	Cons
<ul style="list-style-type: none">• Excellent for getting at broad issues• Allows for elaboration• Consumers can play off of one another• Target a very specific demographic	<ul style="list-style-type: none">• Represent a small sample size• Worry over what others in the group may think• Need to remain aloof from discussion

Ideal for very specific purposes, but not all

Measuring opinions

Surveys – Focus Groups - Interviews

» Interviews

Pros

- Very in-depth
- Personal interest stories

Cons

- Costly
- Inherent bias from researcher

Useful, but very difficult to carry off effectively

Measuring opinions

» Surveys, Focus Groups, and Interviews

Completed projects

- > Interviews
- > Observation
- > Surveys

Methodologies

Quantitative Research

Qualitative Research

Potential (new) market

Market for seizure detection

Ambient Assisted Living market

Medical simulation market

Potential new product

Data management, Synchronization, and Analysis tool (DSA)

EthoVision Online

DriveLab (in cars), market potential

Food Choice Simulator & Food Experience Simulator

DriveLab, market potential

AnyTrack, market potential

- Ethnographic Approaches

Wakefield's telephone, online, and in-person methodologies provide decision-grade research results for consumer and

Focus groups, in-depth interviews, and ethnographic research from Wakefield uncover

 **Customer 360**

Profiles each of your customer segments with actionable demographic, behavioral, lifestyle and attitudinal data to drive smarter marketing strategies.

 **Hitwise®**

Measures millions of consumers' online behavior on PCs, tablets and smartphones to deliver insight into consumer website usage and search behavior as well as online marketing performance.

 **Simmons® National Consumer Studies**

Annual survey of 30,000 consumers, measuring 8,000 brands and 700 psychographic questions with 60,000 elements in all. Understand key demographic groups, including Kids & Teens, LGBT, critical Hispanic ethnic groups and all major media behaviors covering television, online, mobile, print, radio, social media and more.

 **SimmonsLOCALSM**

Reports nearly 60,000 consumer data elements, including media behaviors, brand preferences and attitudes down to the ZIP Code level across the country.

 **Quantitative**

- Custom Research Design & Analysis
- Omnibus





Consumer thinking → Consumer behavior

- » **Purchase Intent** is the extent to which a consumer will categorically estimate a purchase decision for some time in the future

» Which is most true about product X?

- I definitely would use product X
- I probably would use product X
- I might use product X
- I probably would not use product X
- I definitely would not use product X

<i>Viewing experience</i>			
Please indicate the most appropriate answer.			
1. How were the colors?	Faint	0 0 0 0 0 0 0	Clear
2. How did you experience the motion of the scene?	Shaking	0 0 0 0 0 0 0	Fluent
3. How did you experience the sharpness?	Blurry	0 0 0 0 0 0 0	Sharp
4. How would you judge the brightness?	Vague	0 0 0 0 0 0 0	Clear
5. What do you think about the sound quality?	Very bad	0 0 0 0 0 0 0	Very good
6. How real did the scene look to you?	Artificial	0 0 0 0 0 0 0	Natural
Your future of television			
7. Do you have a flat screen at home?		Yes	/No
8. Do you think you will switch to a flat screen in the next 12 months?		Yes	/No
What do you think HDTV has to offer?			
9. To what extent do you think HDTV has a sharper image than a regular television?	Little difference	0 0 0 0 0 0 0	Much sharper
10. To what extent do you think HDTV has better colors than a regular television?	Little improvement	0 0 0 0 0 0 0	Lot better
11. To what extent do you think HDTV has a more realistic image than a regular television?	Little extra realism	0 0 0 0 0 0 0	Lots of extra realism
12. To what extent do you think image and sound quality depend on the signal?	Little influence	0 0 0 0 0 0 0	Lots of influence
13. To what extent does HDTV influence sound quality?	Little influence	0 0 0 0 0 0 0	Lots of influence
14. Are you willing to pay extra for the possible quality improvement offered by HDTV?	Little	0 0 0 0 0 0 0	Lot

Consumer thinking → Consumer behavior

- » Tap into consumers' reasoning and logic
 - Numbers (sales, discounts)
 - Options (choices)
 - Visualization



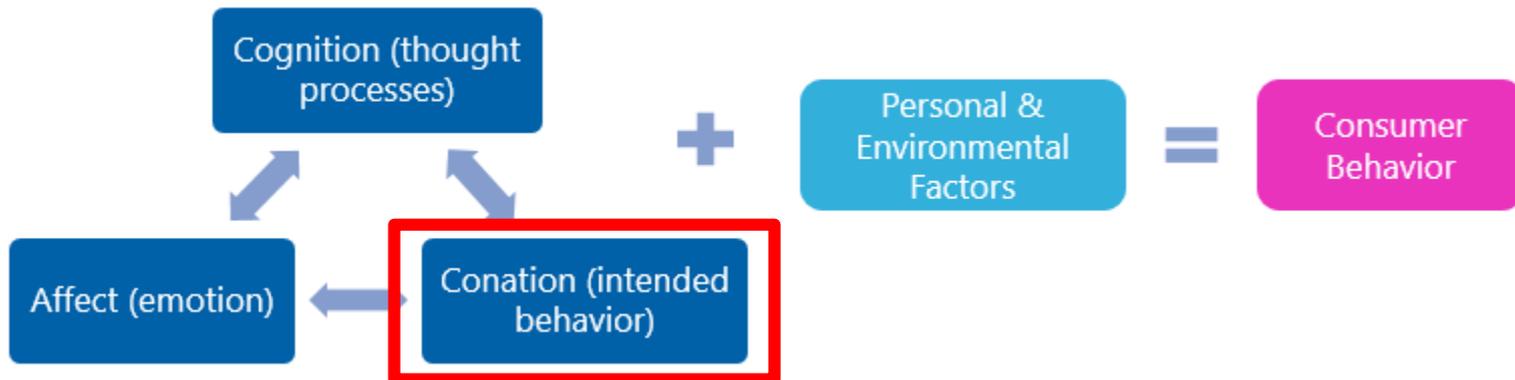
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» So... we've figured out consumers!

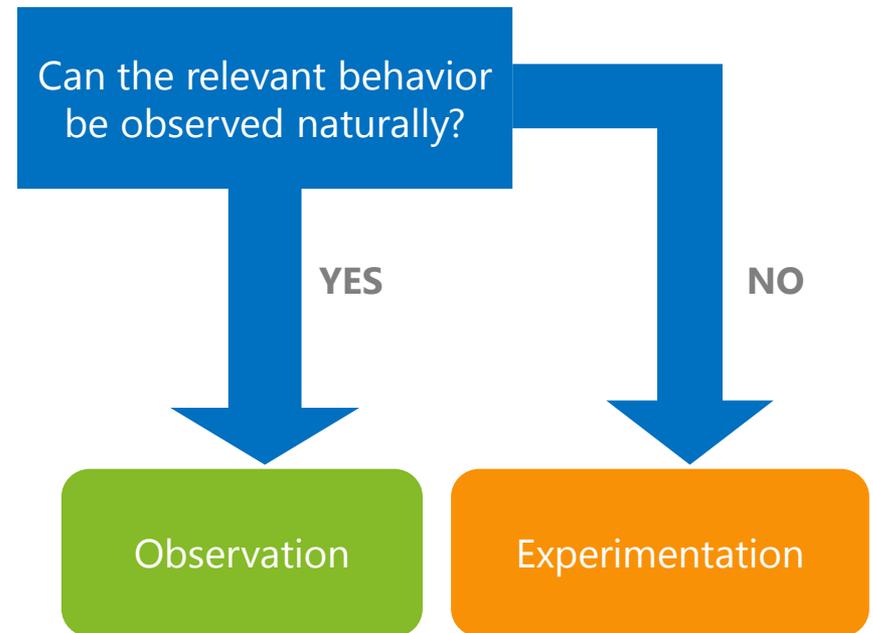


» But wait...



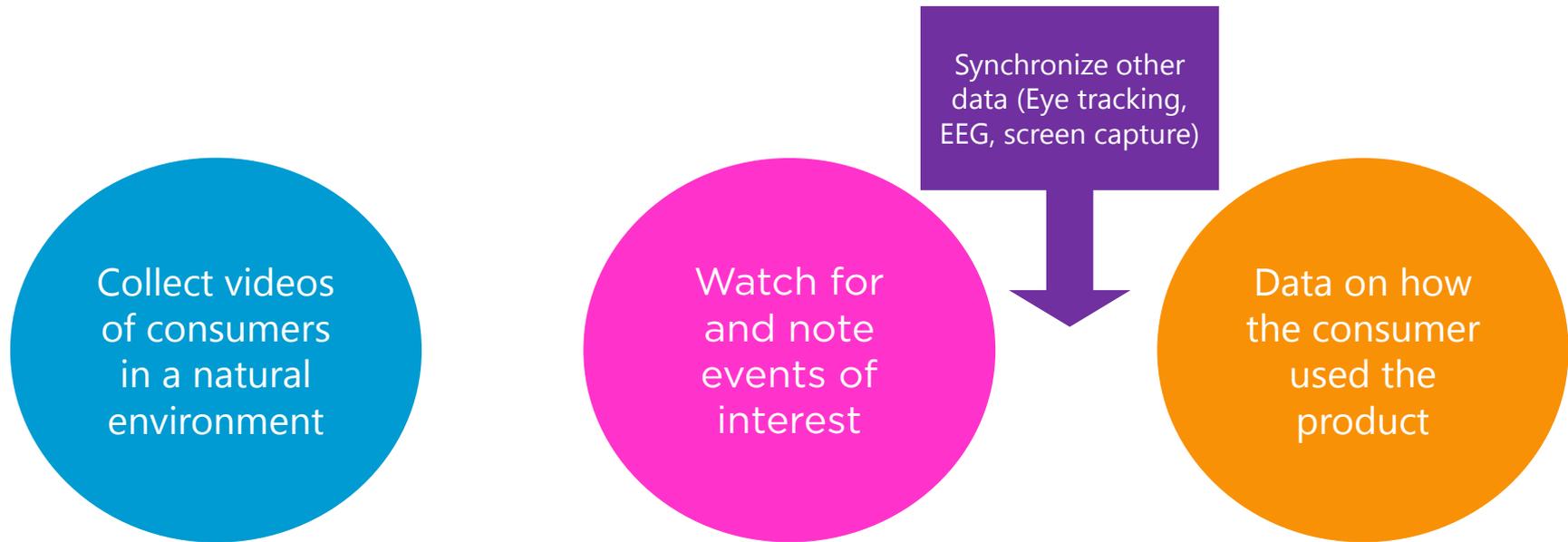
Measuring Consumer Behavior

- » Why do we measure consumer **behavior**?
 - Because **actions** speak louder than words
 - Behavior does not always match what people think they will do
- » Observation / Ethnography
 - Allows the consumer to act naturally
 - Technological advances = new research



Measuring consumer behavior

- » How do we measure consumer **behavior**?
 - Record, watch, and note the consumers' behaviors
- » Reduce subjectivity and make research more objective



The Observer[®] XT

Using The Observer XT: In-home Study

- » Observe refrigerator usage **in the home**, over a 2 week period
 - Option 1: Survey
 - Option 2: Observe actual behavior

Who is in contact with refrigerator (father/mother/child)

What compartment (freezer/refrigerator)

What part (door/shelf 1/drawer...)

What is the **posture** of the person (squat/deep bend)

Type of interaction (open/close/load products/clean...)

What product is loaded/taken from the refrigerator

What package is the product in (bottle/plastic box...)



Using The Observer XT: Laboratory Study

- » Observe consumers in a naturalistic restaurant; experiment with **food presentation** and how it impacts food **choice**
 - Option 1: Survey
 - Option 2: Observe actual behaviors
- » **Question:**
 - Does presentation at the salad bar affect selection and buying behavior?
- » **Method:**
 - Present buffet with different chicken sandwiches labeled:

NEW

Lower Price

Healthy

- » **Results:**
 - Men preferred those labeled “New”
 - Women preferred those labeled “Healthy”

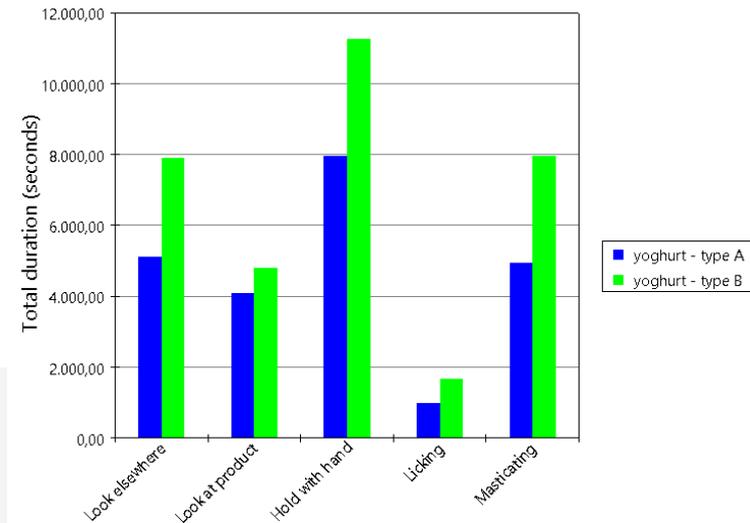
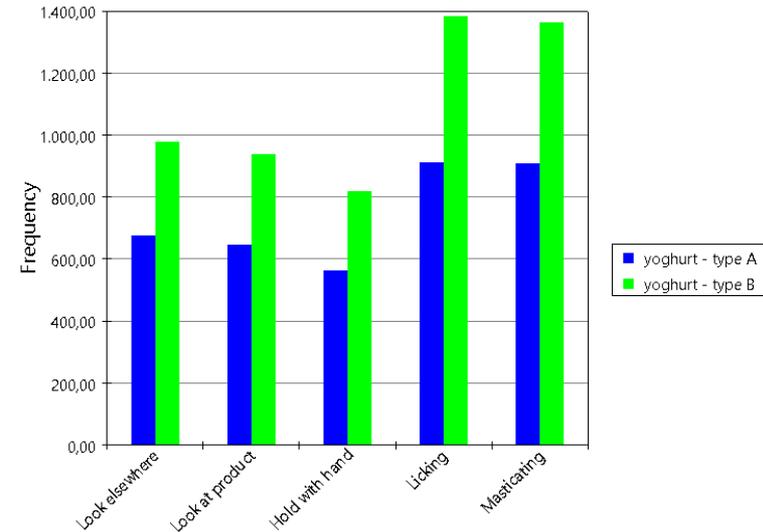


Using The Observer XT



- » Which yogurt does a target demographic prefer?
 - Option 1: Survey
 - Option 2: Observe actual behaviors

Conclusion:
Customers like yogurt A better than yogurt B



Measuring behavior: *Direct observation*

Pros

- Very in-depth
- Note exactly what the consumer does
- Note many activities
- Little bias by researcher
- Easily analyze large data sets

Cons

- Can be costly
- Requires time
- A lot of data is gathered
- Requires *a priori* knowledge of anticipated outcomes

For certain questions, this is the only real way to measure consumer behavior

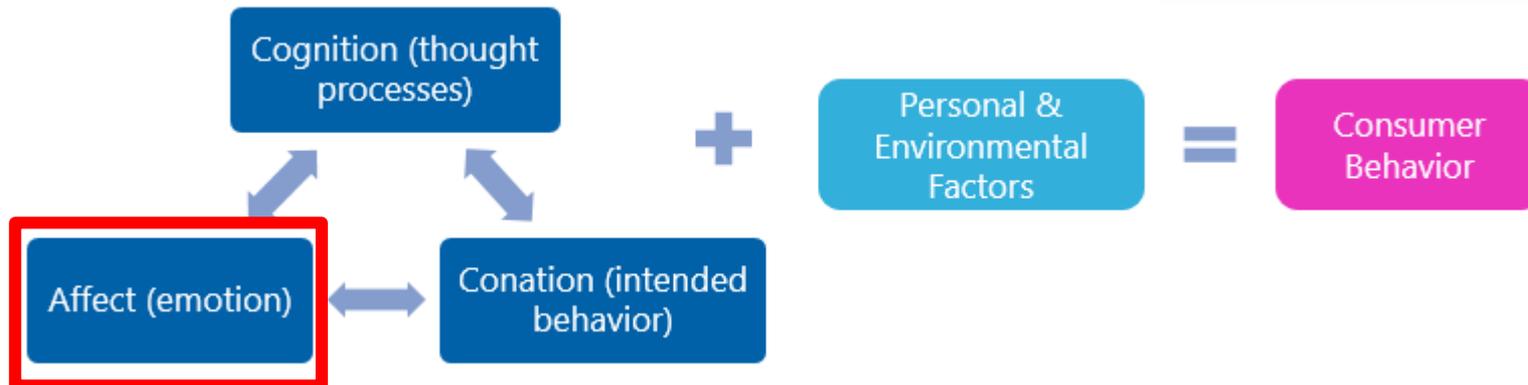
» So... we've figured out consumers!



There's no evidence whatsoever that men are more rational than women. Both sexes seem to be equally irrational.

Albert Ellis

» But wait...



Why study affect/emotion?

- » What is it about emotions that are worth studying?
 - Universally expressed
 - Unconscious, Non-declarative
 - Powerful
- » We know that tapping into emotion works!
 - Branding/logos
 - Conditioning (jingles!)
 - Messaging
 - Feeling (color, cuteness)



How is emotion typically measured?

- » Neuromarketing
- » Storytelling
- » Reaction time

But what about....

- » The face!!

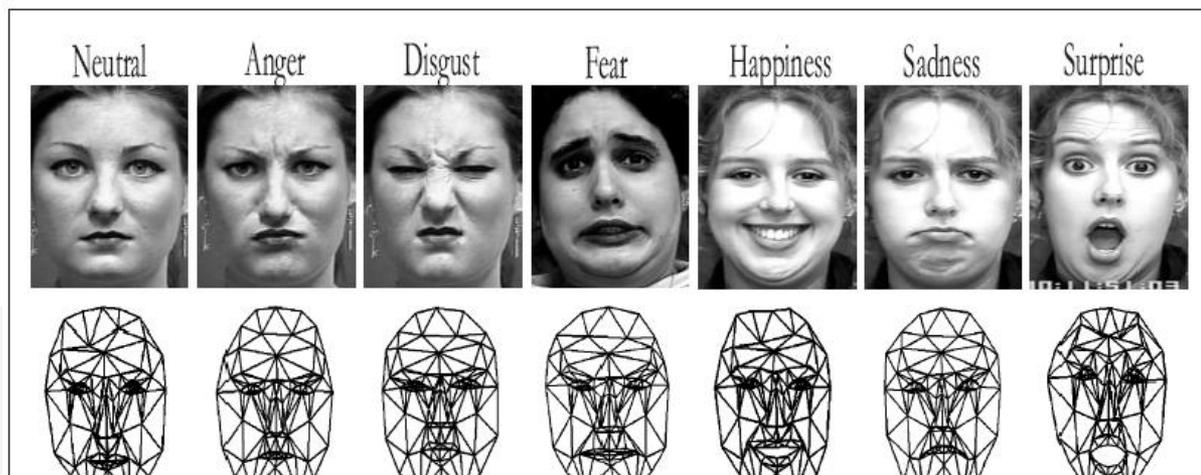


The face: a window into the mind

"His dress told her nothing, but his face told her things which she was glad to know."

— A.A. Milne, *Once on a Time*

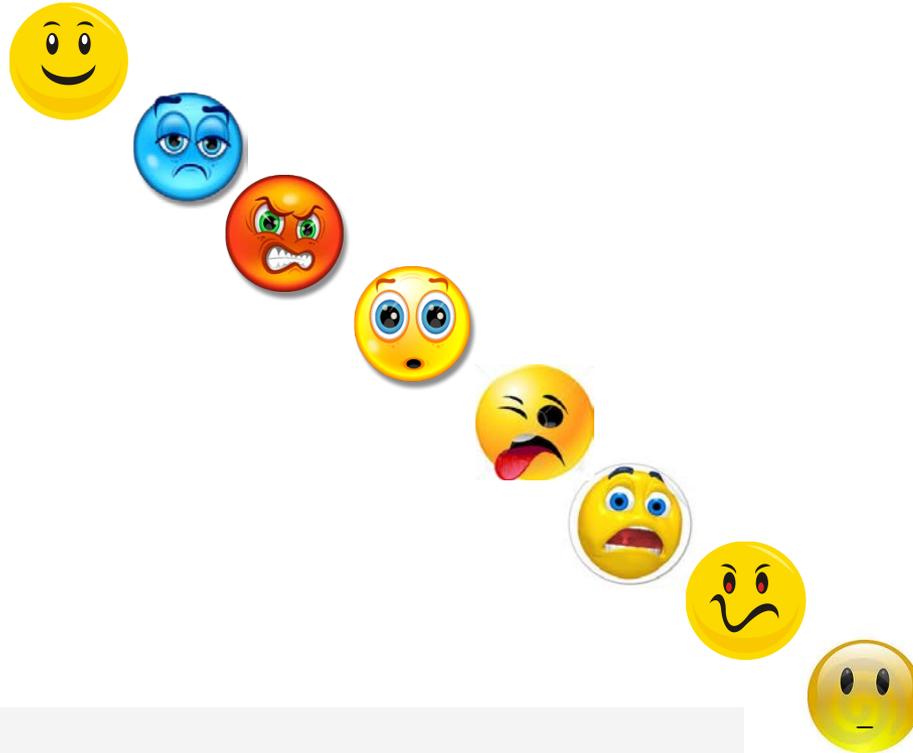
- » Are human emotions learned or innate?
 - Charles Darwin
 - Neuroscience: fusiform face gyrus
 - Paul Ekman



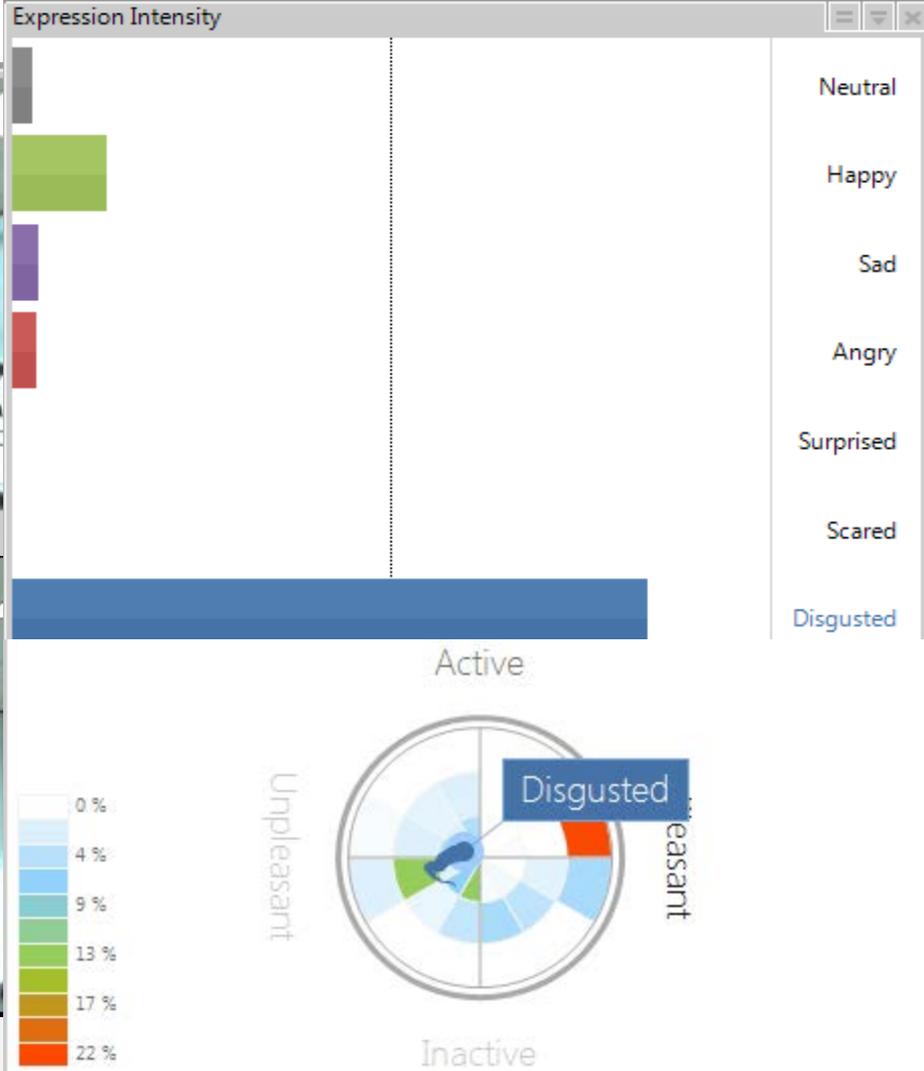
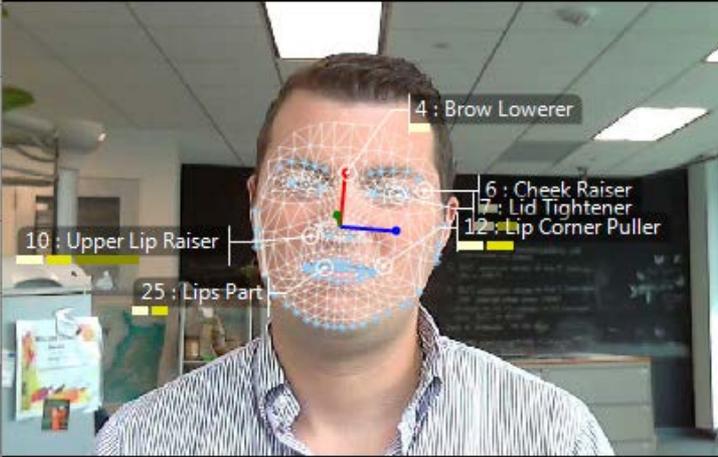
Automatic analysis of Facial Emotion

- » FaceReader: Automatically analyze facial emotion
- » Classify 7 basic emotions:

- Happy
 - Sad
 - Angry
 - Surprised
 - Disgusted
 - Scared
 - Contempt
- (plus a neutral)



Automatic analysis of Facial Emotion



A facial emotion case study

- » A fragrance company uses FaceReader to study:



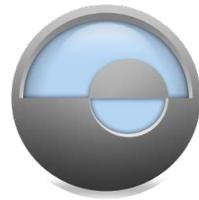
Immediate reaction

Emotion displayed
when the odor is
first smelled

Habituation

How emotion
changes with
continued exposure
to the odor

Multiple ways to measure facial emotion



FaceReader



In person



Online



*User
Experience*



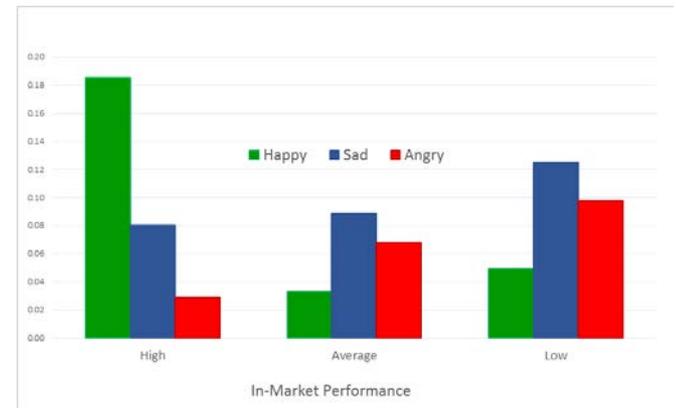
*Product
Research*



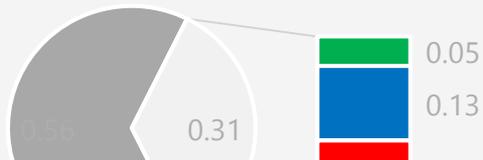
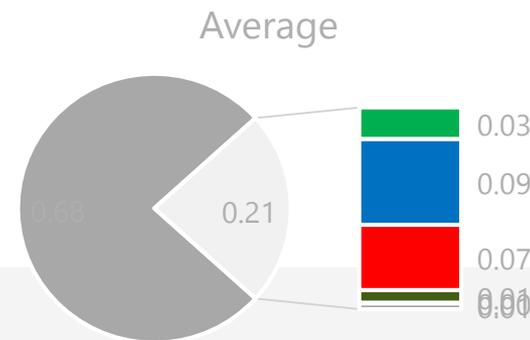
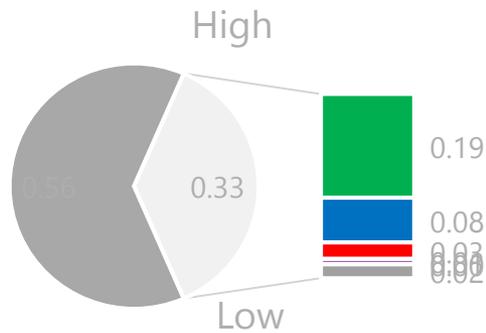
Ad Testing

FaceReader validation for ad testing

- » As hypothesized, ads that perform(ed) well showed significantly higher levels of Happy and a trend towards lower Anger than average- and low-performing ads.

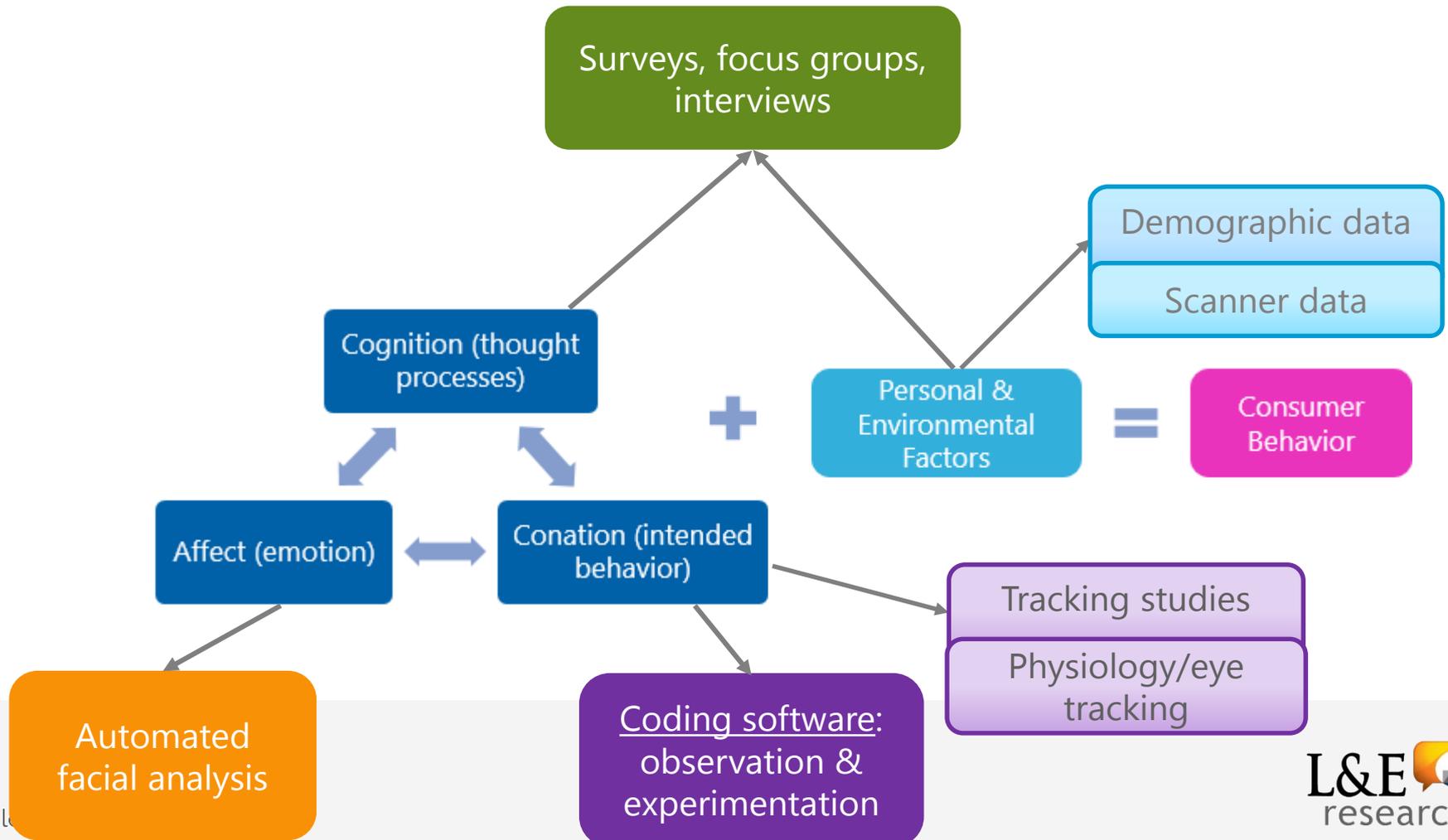


- » Average ads elicit less emotion in general



So... NOW we've figured out consumers?

» We're getting there...



Noldus Information Technology:

Human Observation. Clear results.

Abbe H Macbeth, PhD

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Regional Sales Manager

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