


# Behavioral Economics in Healthcare

Applications, Implications, Myths and Challenges

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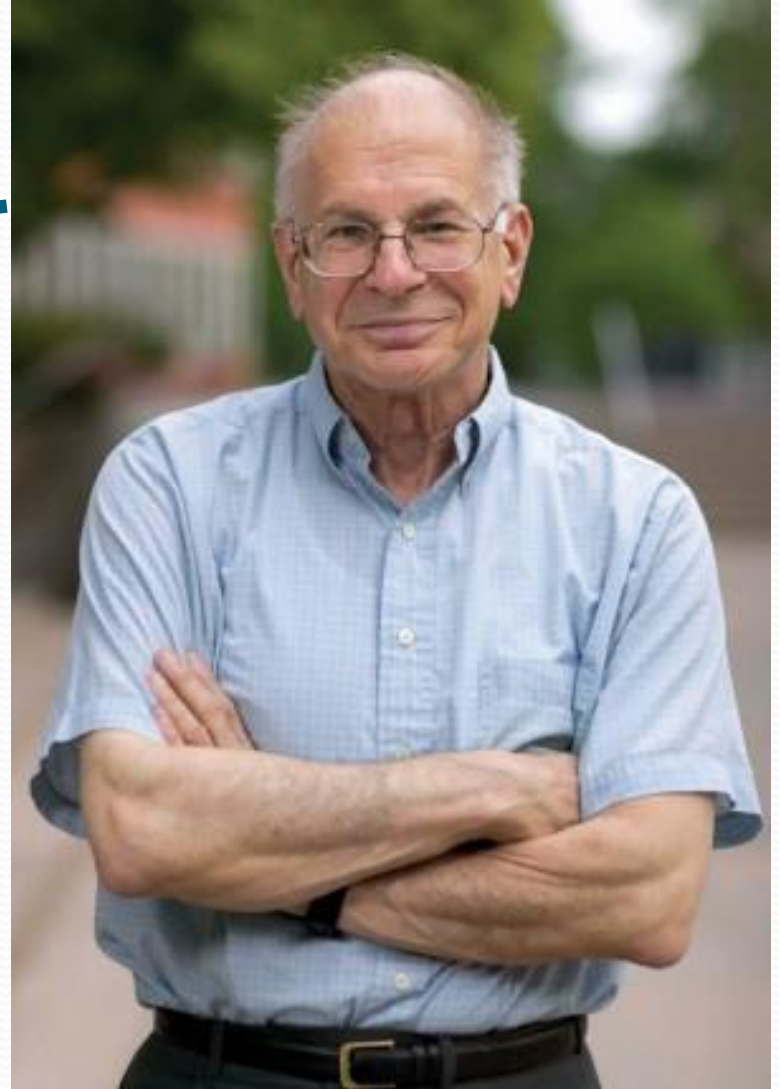


The purpose of this discussion is to share and generate ideas in the field of pharmaceutical market research. The subjects discussed today will help participants to strengthen their own companies' independent market research efforts, thereby driving competition and better directing pharmaceutical products to the patients that need them.

It is the intention of all participants to operate in strict compliance with all state and federal laws, including, but not limited to, antitrust laws.

Nothing discussed in this conference is intended to limit each company's ability or incentive to conduct whatever market research it thinks best, to establish standards for market research, to result in an agreement as to price or a division of customers, or otherwise to restrain competition.

Let's take a Quiz....



# Question #1:

**A town has two hospitals: one large and one small. Assuming there is an equal number of boys and girls born every year in the United States, which hospital is more likely to have close to 50 percent girls and 50 percent boys born on any given day?**

A. The larger

B. The smaller

C. About the same (say, within 5 percent of each other)

## Question #2

**A team of psychologists performed personality tests on 100 professionals, of which 30 were engineers and 70 were lawyers. Brief descriptions were written for each subject. The following is a sample of one of the resulting descriptions:**

Jack is a 45-year-old man. He is married and has four children. He is generally conservative, careful, and ambitious. He shows no interest in political and social issues and spends most of his free time on his many hobbies, which include home carpentry, sailing, and mathematics.

What is the probability that Jack is one of the 30 engineers?

- A. 10–40 percent
- B. 40–60 percent
- C. 60–80 percent
- D. 80–100 percent

# Question #3

Part 1: **Choose between getting \$900 for sure or a 90 percent chance of getting \$1,000.**

A. Getting \$900

B. 90 percent chance of getting \$1,000

Part 2: **Choose between losing \$900 for sure or a 90 percent chance of losing \$1,000.**

A. Losing \$900

B. 90 percent chance of losing \$1,000

# Congratulations! (or not)

- If you avoided the common errors of reasoning that lead most people to do the irrational thing on repeated experiments, you may justly gloat a little.
- But only a little:
- Jonah Lehrer and Big Thinker Tauriq Moosa report, *smarter people may have a particularly hard time talking themselves out of their biases.*

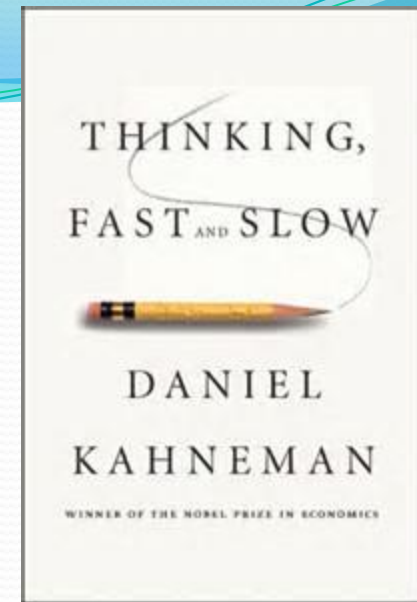
# Defining Behavioral Economics

- **Behavioral Economics** (BE) studies the effects of psychological, social, cognitive, and emotional factors on the economic decisions of individuals and institutions and the consequences for market prices, returns, and the resource allocation. BE is primarily concerned with the bounds of rationality of economic agents.
- An interdisciplinary field of science which seeks to understand, predict, and implement behavioral change
- Applies psychological insights into human behavior to explain decision-making



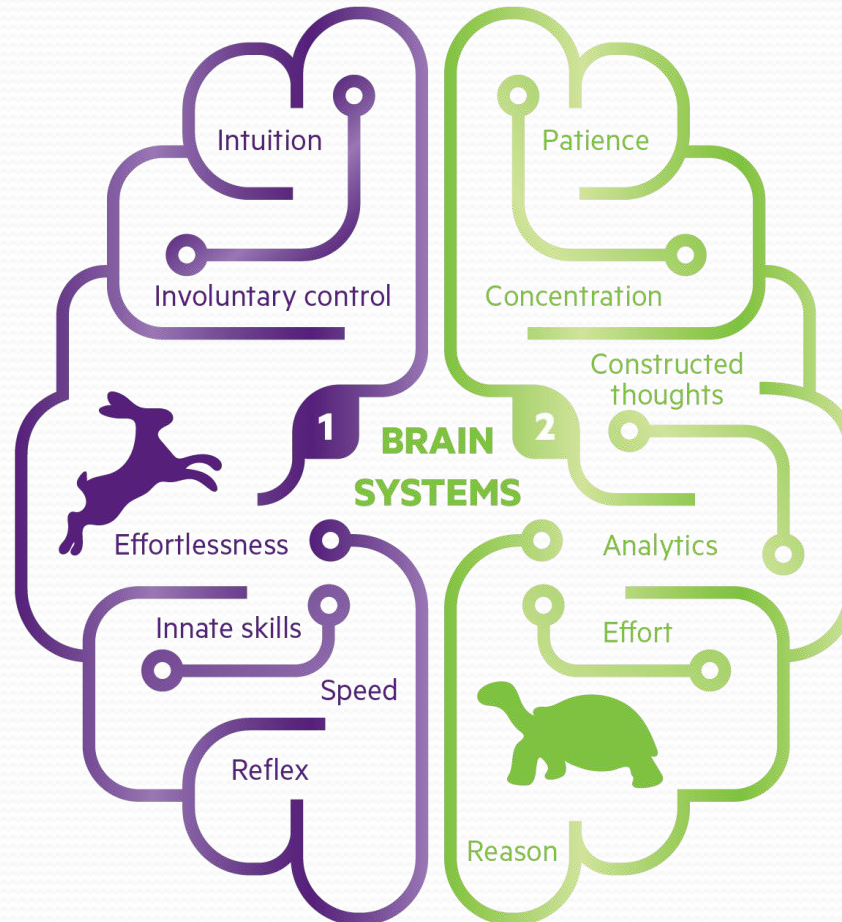
# Heuristics (Biases)

- “Heuristics” are the shortcuts humans use when making decisions to simplify decision-making
  - If you’re driving in the United Kingdom for the first time don’t know the traffic laws, heuristics might help you correctly assume that a green light means go and red means stop.
  - However, that same heuristic could prove harmful if you start driving in the right-hand lane.
- Kahneman separates the thinking process into two types:
  - System 1, in which efficiency comes at the cost of accuracy
  - System 2, which requires a lot of focus and can sometimes prevent System 1 from making mistakes – **BUT IT HAS LIMITED CAPACITY**



# Thinking Fast & Slow

**FAST**  
System 1 Thinking  
Automatic  
Intuitive  
Emotional  
Heuristic



**SLOW**  
System 2 Thinking  
Calculating  
Conscious  
Logical  
Rule-Based

# BE at work in Decision Making

System 1 -- Emotional



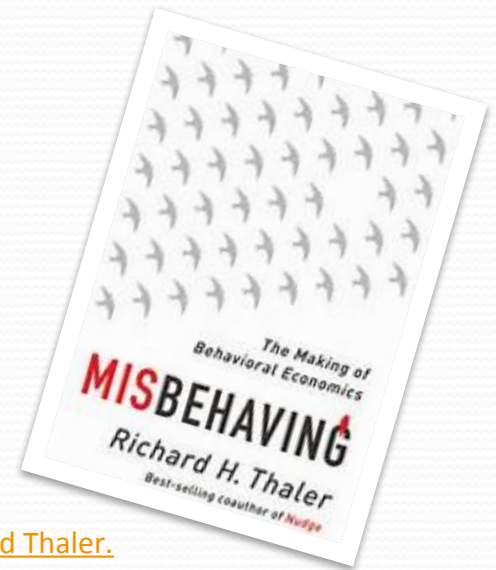
System 2 – Logical



*“System 1 is indeed the origin of much that we do wrong, but it is also the origin of most of what we do right-which is most of what we do” (Daniel Kahneman)*



*‘Behavioral economics is no longer a fringe operation and writing an economic paper in which people behave like Humans is no longer considered misbehaving, at least by most economists under the age of 50.’  
-- Richard Thaler*



[‘Misbehaving: The Making of Behavioral Economics’ by Richard Thaler.](#)

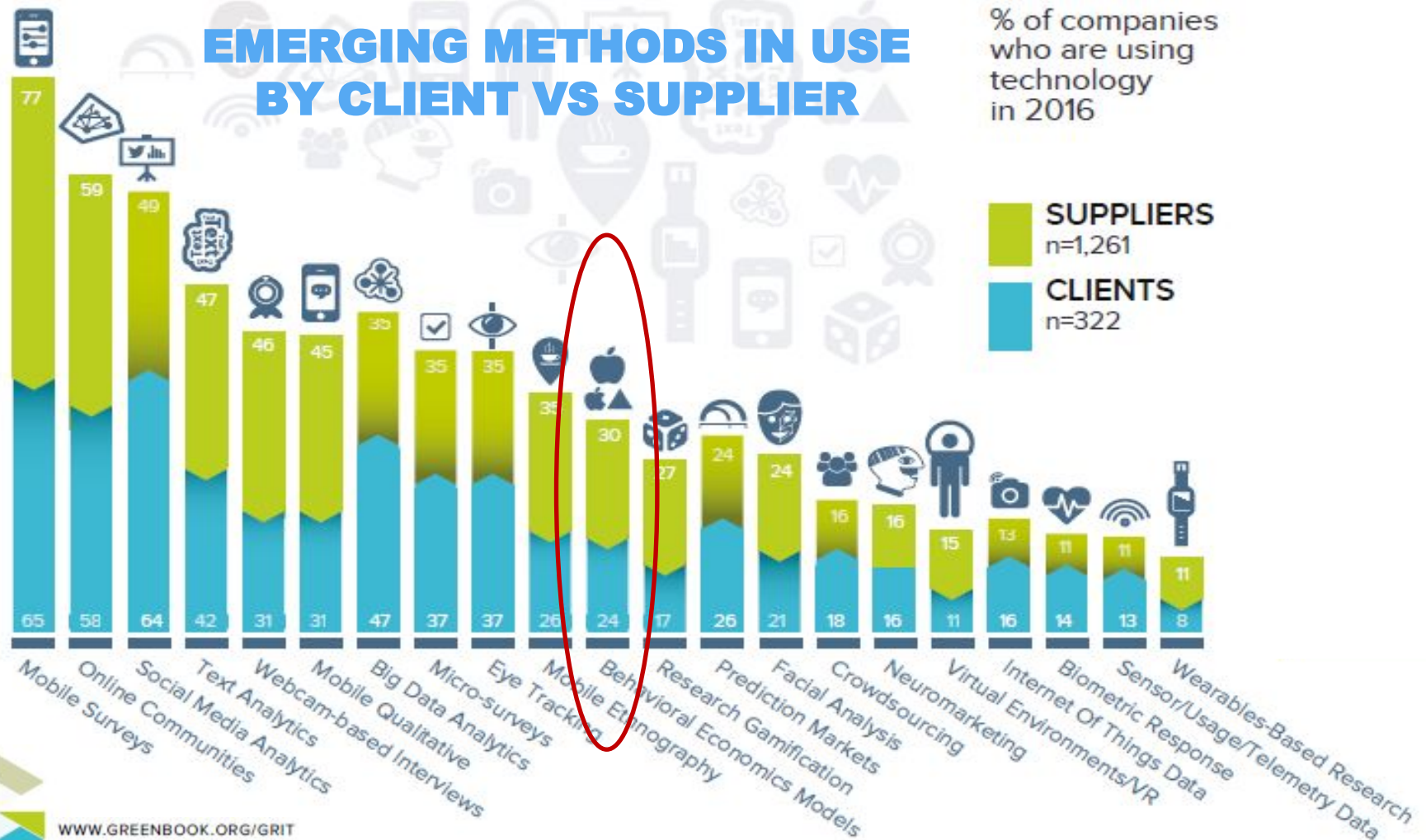
# And yet, BE still has far to go in MR

## EMERGING METHODS IN USE BY CLIENT VS SUPPLIER

% of companies who are using technology in 2016

**SUPPLIERS**  
n=1,261

**CLIENTS**  
n=322



# Common Myths Limiting Adoption

- **Behavioral Economics tells us that ‘all market research is wrong’**
  - *“The trouble with market research is that people don’t think how they feel, they don’t say what they think and they don’t do what they say.”  
(David Ogilvy)*
- **Behavioral Economics tells us that people are ‘irrational’**
  - *“System 1 is indeed the origin of much that we do wrong, but it is also the origin of most of what we do right-which is most of what we do”  
(Daniel Khaneman)*
- **Behavioral Economics is a ‘Qual Thing’**
  - *“there seem to be a remarkable number of market researchers who seem to assert that BE is mostly a qual thing” Ray Poyner forcibly and eloquently argues that “BE is “mostly a quant thing”*

# Large Implications for Healthcare

- In how we design research
- In understanding how physicians make decisions
- In the choices patients make
- In communications messages and channels
- In collectively solving population health challenges such as diabetes, obesity, heart disease.
- And many more...

# Panelists



**Helen Lang Suskin**  
Pfizer, Inc.



**Arvind Balasundaram**  
Sanofi



**David Berman**  
Merck & Co., Inc.



# Call to Action

## For Agencies

- Provide Evidence Based Methodologies
- Develop tools/instruments and analyses that take into account known biases/heuristics
- That are Scientifically Accurate
- Reproducible/Validated
- Dimensionalize context more in decisions

## For Corporate Researchers

- Find your beachhead
- Educate your team mates and marketers
- Eliminate “unforced errors”
- Pilot or do research on research
- Create a to → from Framework
- Move from acknowledging ‘uncertainty’ in decision-making (domain of statistics) to studying ‘how decisions are made under uncertainty’ (domain of BE)

I have always believed that scientific research is another domain where a form of optimism is essential to success: I have yet to meet a successful scientist who lacks the ability to exaggerate the importance of what he or she is doing, and I believe that someone who lacks a delusional sense of significance will wilt in the face of repeated experiences of multiple small failures and rare successes, the fate of most researchers.

Daniel Kahneman

# Sources

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