



The New Science of Judgment & Decision Making

2019 AGA Northern Utah Chapter
Spring Conference

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So why listen to an accounting professor talking about judgment and decision making ?

- A little about my background...
- Accounting is about using information to formulate and make decisions
- Much of the accounting research in my area examines the psychology behind judgment & decision making
- Objective, unbiased professional judgment is the bedrock of effective and ethical leadership!

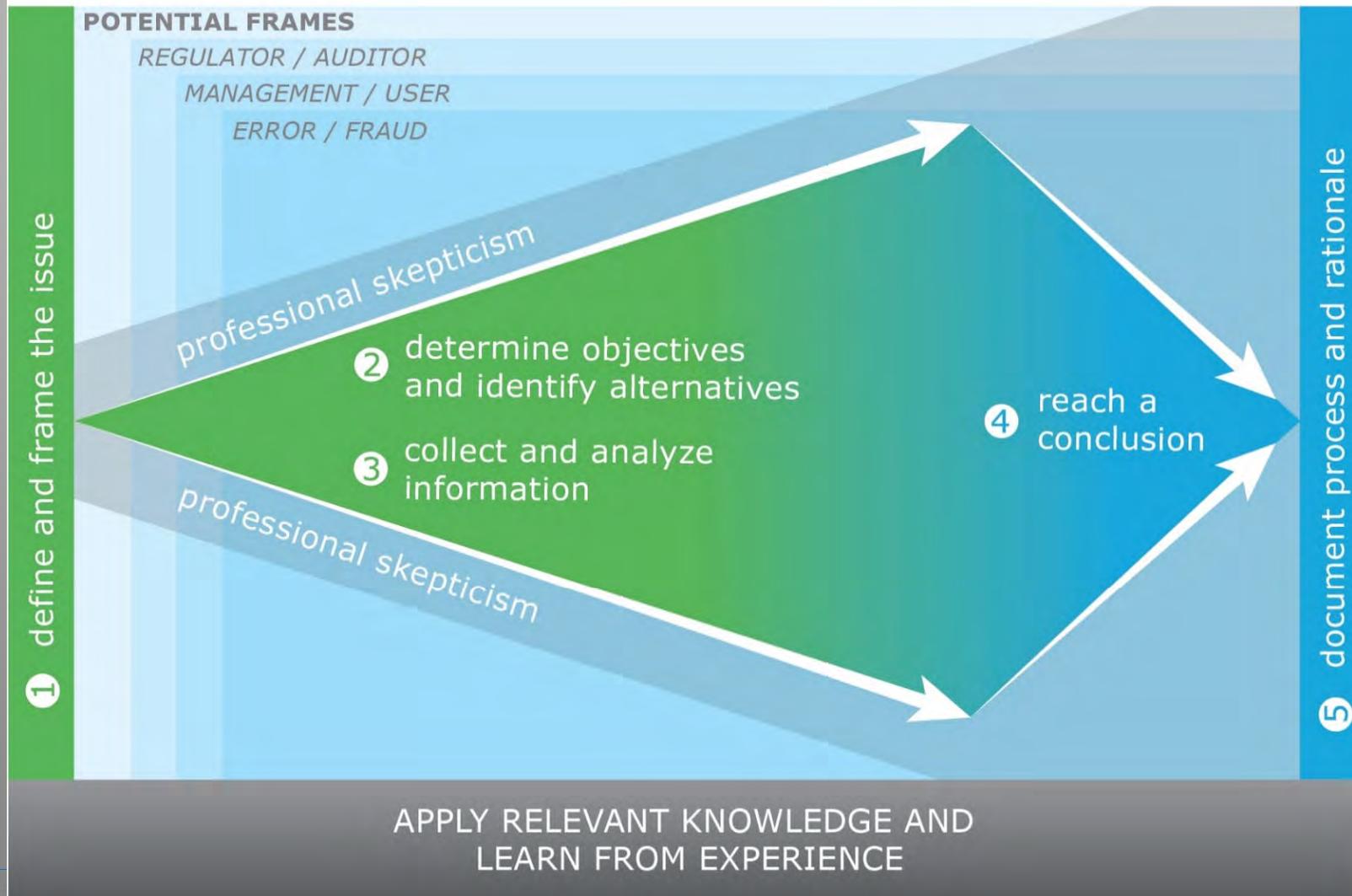
Professional Judgment:

--A simple process-oriented professional judgment framework can be powerful!

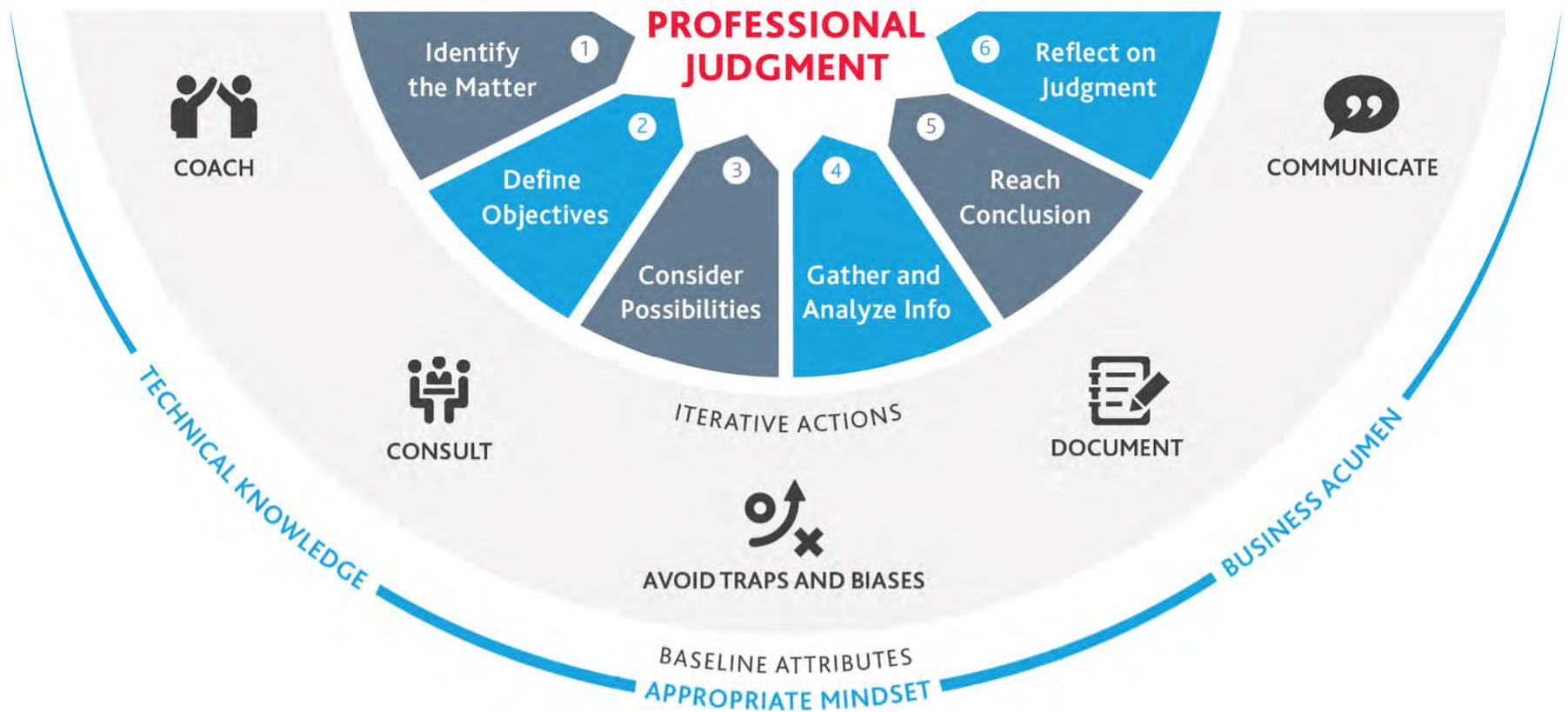
The KPMG Professional Judgment Framework



McGladrey, LLP Professional Judgment Framework



BDO Professional Judgment Framework





Coach



Consult



Avoid traps and biases



Document



Communicate

Iterative Actions

Coaching

- Coaching begins and ends the steps in the judgment process
- More senior members of teams use judgment situations as coaching opportunities to develop other team members
 - A common framework and vocabulary is important to development
 - On-the-job learning—coach through the process, watching for good judgment processes and for traps and biases!
 - Performance Review—project wrap-ups, annual, etc. Good judgment processes? Avoid traps and biases?
 - Life Tip: Is it good to “be open to feedback and criticism”?
 - Learn from mistakes...but avoid too much emphasis on outcomes!

Process vs. Outcome

- **June 3, 1988: Navy cruiser USS Vincennes detected an approaching aircraft.**
 - One year earlier, a similar vessel (the sister ship of the Vincennes) was attacked by the Iraqi Air Force, killing 37 Americans
- **The Vincennes crew were aware that Iranian F-14s were armed with sufficient firepower to sink the cruiser.**
- **The crew made ten attempts to contact the approaching aircraft on all military and civilian frequencies.**
- **Waiting until the last possible moment, Captain William C. Rogers III ordered his crew to fire on the aircraft.**



Process vs. Outcome

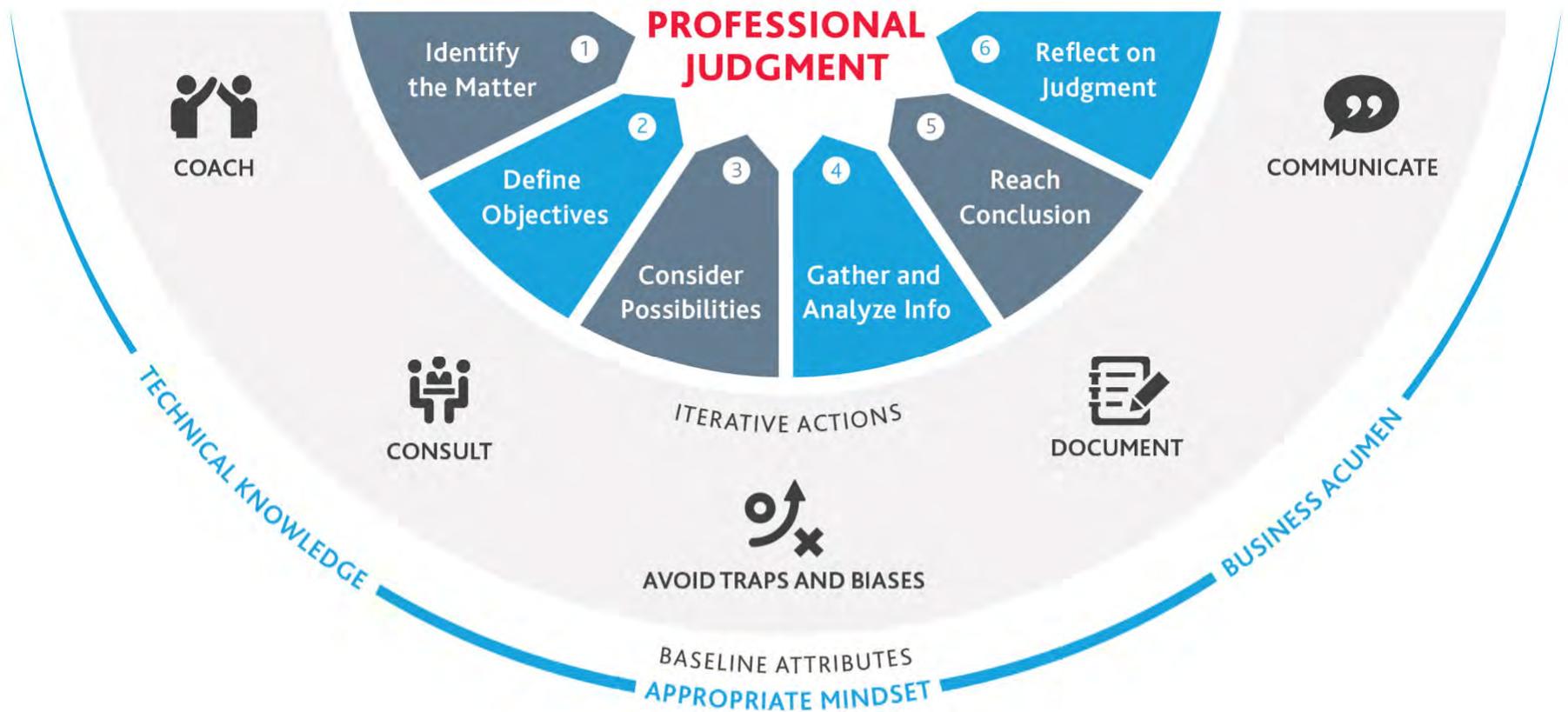
- **The result: 290 civilians were killed, the 8th deadliest disaster in aviation history.**



Baseline Attributes

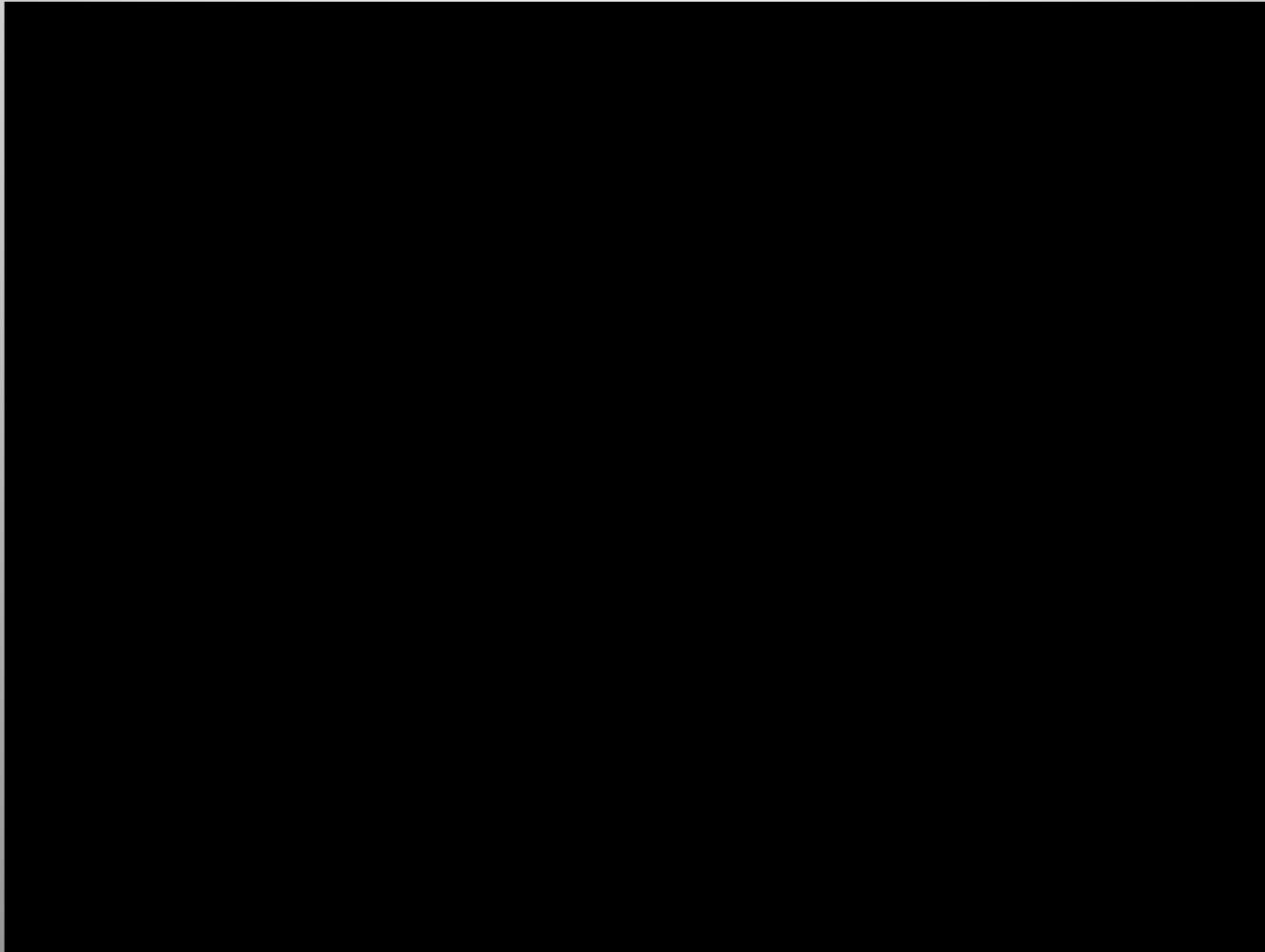
Technical Knowledge — Appropriate Mindset — Business Acumen

BDO Professional Judgment Framework



Common Traps in Applying a “Simple” Judgment Framework

Do you remember what is the first trap?



Trap No. 1: The Rush to Solve

A good solution to a well-defined problem is almost always better than an excellent solution to a poorly defined or 'wrong' problem.

Trap No. 2: Decision Triggers

In defining the problem, always ask...

What triggered this decision?



Example: The phone call...



A key to making good decisions: Develop a good set of Alternatives

Decisions can only be as good as the best alternative considered!

The key to this step is doing a good job of Step 1--identifying the issue and... specifying the objectives

Charles Kettering,
famed inventor
and head of
research for GM:
*“A problem well-
stated is half-
solved.”*



Judgment and Decision-Making... in teams

- Avoid GroupThink tendencies
- Promote diversity of thought
- Structure meeting to enhance preparation and overcome barriers to participation
- Facilitate and encourage sharing of insights
- Beware of the powerful tendency toward conformity!

The Behavioral Science Guys on Conformity



Proactive Framing of Judgments

The Impact of Judgment Frames

- Judgment frames are mental structures we use, usually subconsciously, to simplify, organize, and guide our understanding of a situation.
- Frames determine the information we see as relevant or irrelevant, important or unimportant
- Be aware—you always have a frame!
- No single best frame, important to identify that frame and consider alternative frames

Let's watch a simple illustration of
how powerful framing can be!

Framing



Don't Get Framed!

- Understand your current frame and its sources
- Challenge your current frame: Seek others' opinions, welcome diversity, consider alternative metaphors
- Consider the implications of different frames and harvest insights...even if you don't agree with the frame...
- Frame and re-frame intentionally and proactively!
- Example: The “war on drugs”

The Power of a Frame

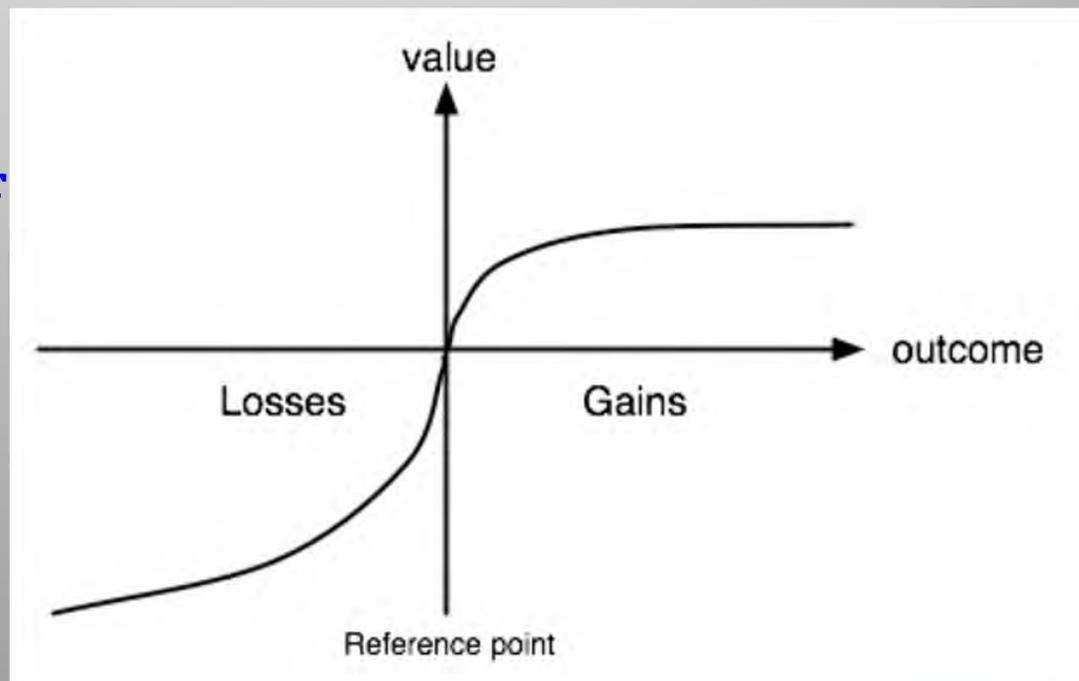
**Barry McCaffrey—Bill Clinton’s drug czar—“War on drugs”
...or “cancer on our nation”?**



Loss Aversion

- People are *loss averse*, in that they strongly prefer *avoiding losses* to *acquiring gains*.
- This also leads them to be *risk seeking* in the *loss domain* but *risk averse* in *gain domain*.

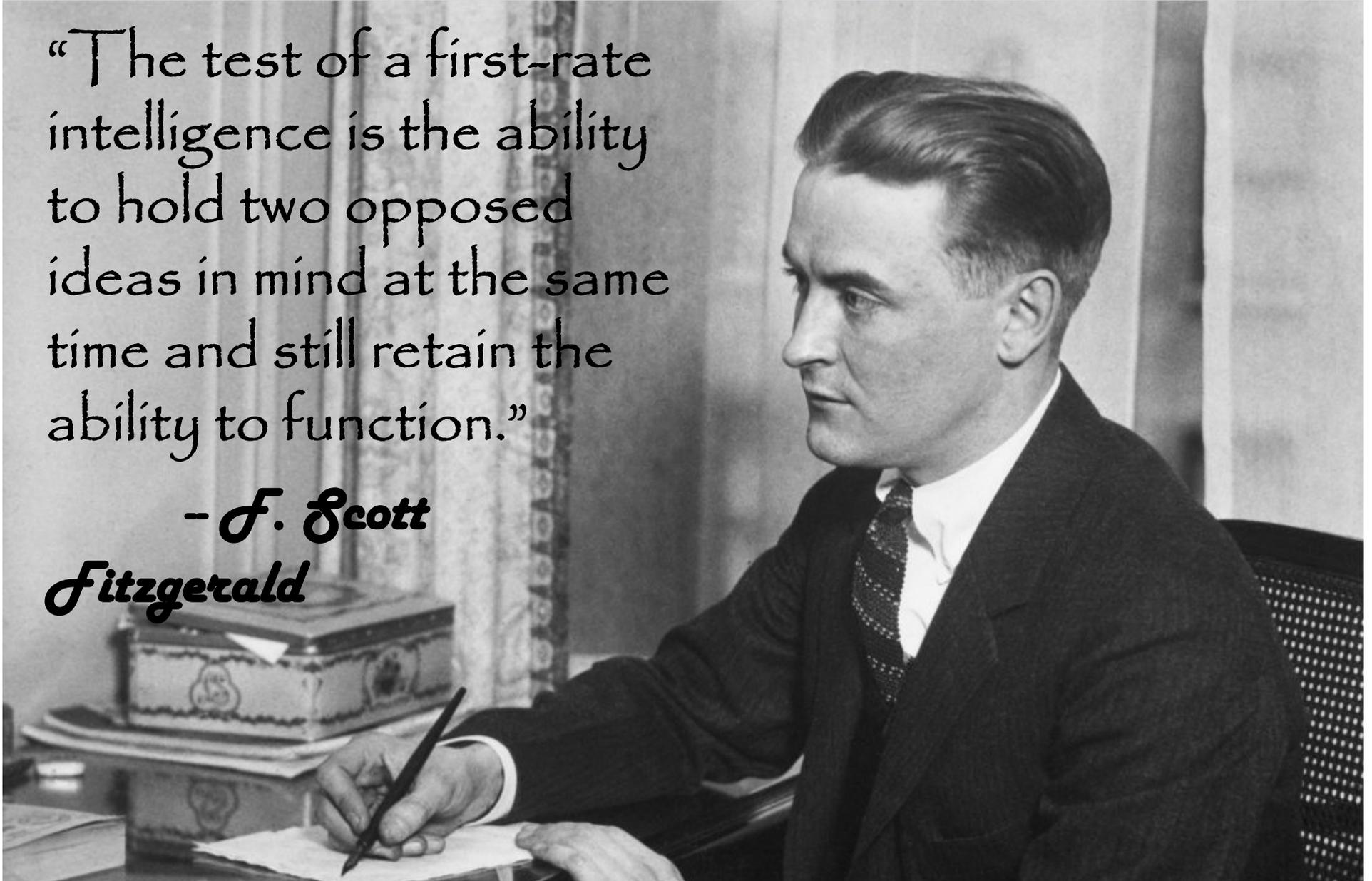
- This is a key
- component of
- PROSPECT
- THEORY



Master Your Cognitive Dissonance!

“The test of a first-rate intelligence is the ability to hold two opposed ideas in mind at the same time and still retain the ability to function.”

- *F. Scott
Fitzgerald*



Systematic Judgment Biases



Judgment Tendencies

- **Anchoring**
- **Availability**
- **Confirmation**
- **Overconfidence**
- **Information Pursuit Bias**

Anchoring Tendency



Anchoring and Adjustment

We make assessments by starting from an initial value and adjusting away from that value to form a final judgment. However, the adjustment from the anchor is typically insufficient.

Anchoring and Adjustment—Real Estate



Anchoring and Adjustment—Real Estate



Overconfidence Bias



Overconfidence Bias

Most of us are overconfident in our judgment abilities and do not acknowledge the actual level of uncertainty that exists.

Overconfidence among Experts

- “Heavier-than-air flying machines are impossible”

Overconfidence among Experts

- “Heavier-than-air flying machines are impossible”

Lord Kelvin, British mathematician, physicist, and president of the British Royal Society, c. 1895



Overconfidence

- Overconfidence among Experts
- “Even God Himself could not sink this ship.”

Titanic crewman the day the ship was launched.



Availability Tendency



Availability Tendency

- The tendency to consider information that is easily retrievable from memory as being more likely, more relevant, and more important for a judgment.

Question Regarding Available Information

- *Which of the following do you believe most Americans would say causes more deaths in the U.S.?*

Which is more common:

A) death by shark attack

B) death by lawn mower



Question Regarding Available Information

- *Which of the following do you believe most Americans would say causes more deaths in the U.S.?*

Which is more common:

A) death by shark attack

B) death by lawn mower!



- Lawn mower deaths are more common...but stories of death around mowers don't make the news
- In reality: lawn mower deaths are 15 times as likely!
<http://www.rexano.org/Statistics/NumberOddsDeathLifeExotic.pdf>

How Bias Can Impact the Real World

- Large chemical company
- Staff of highly trained technicians responsible for answering phone calls from customers to offer solutions to problems
- Many of the diagnoses were wrong – influenced by their experience on cases that were either very *recent* or very *unusual*



To mitigate the bias, the company developed decision aids based on objective data to help technicians

Confirmation Tendency

We have preferences/hypotheses and then tend to seek confirming evidence in support, and we give confirming evidence greater weight than disconfirming evidence.

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- Study of experienced Big-4 tax professionals...



Information Pursuit Tendency



Information Pursuit Tendency

- Pursuing information, or waiting for it, will lead to greater weighting of it.
- The *source* of information should affect it's value.
- But the choice to pursue, all else equal, should not. But it does!
 - So, important to consider how people will respond to information they have to dig to get.
- Evidence suggests that auditors and managers aren't aware of the effect.
- But marketers are keenly aware!

Information Pursuit in Marketing



SCRATCH & SAVE

ASHLEY FURNITURE HomeStore
You're Guaranteed This Place!

Use your savings today!

SCRATCH HERE TO REVEAL YOUR ADDITIONAL SAVINGS!

A promotional banner for Ashley Furniture HomeStore. It features the text "SCRATCH & SAVE" in large, stylized letters. To the right is the Ashley Furniture HomeStore logo with the tagline "You're Guaranteed This Place!". Below the logo, it says "Use your savings today!". At the bottom left, a pink arrow-shaped box contains the text "SCRATCH HERE TO REVEAL YOUR ADDITIONAL SAVINGS!". A grey rectangular area is present on the right side of the banner.

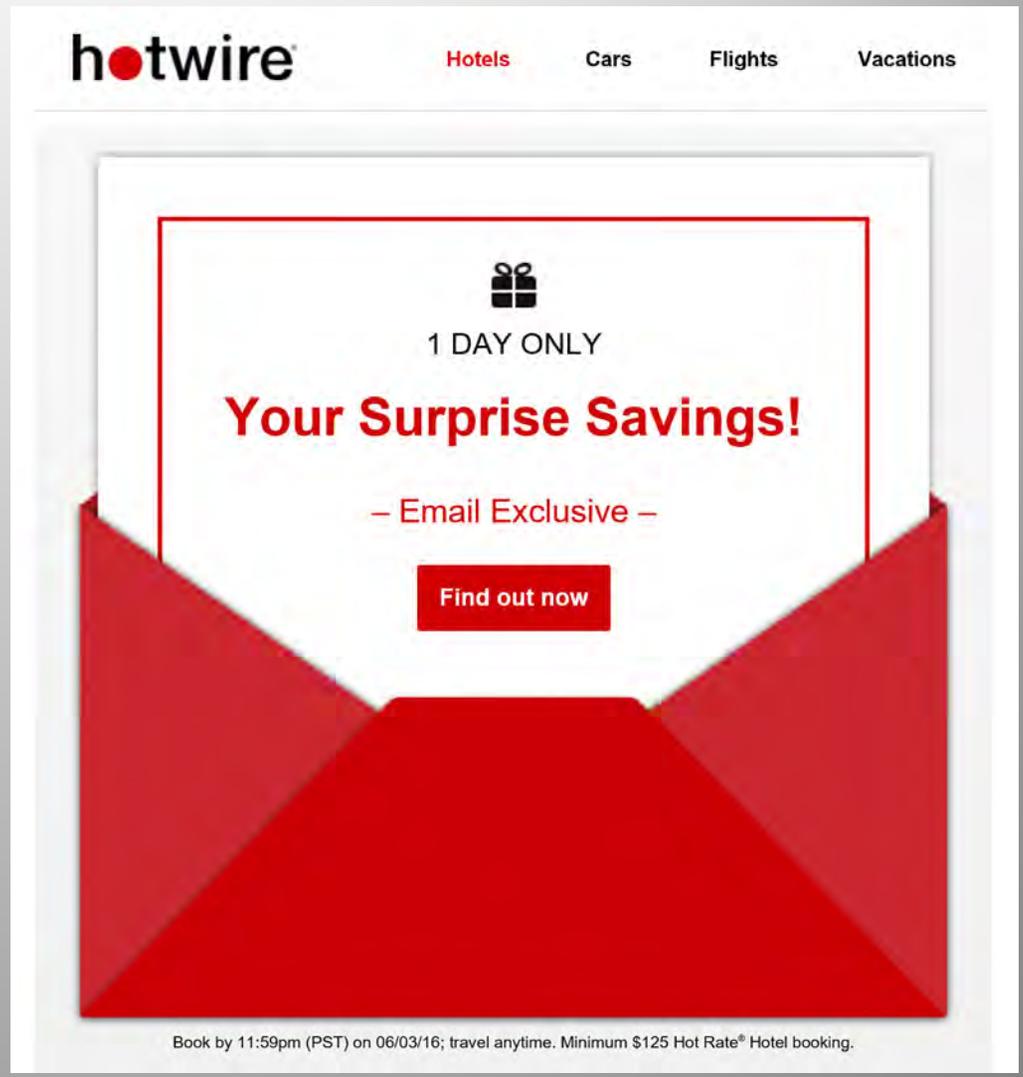


MYSTERY COUPON

Click to receive a deal just for you!

[Learn More](#)

A promotional banner with a blue and white sunburst background. The text "MYSTERY COUPON" is written in large, 3D, red-outlined letters. Below it, it says "Click to receive a deal just for you!". At the bottom, there is an orange button with the text "Learn More".



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Book by 11:59pm (PST) on 06/03/16; travel anytime. Minimum \$125 Hot Rate® Hotel booking.

A screenshot of the Hotwire website. The top navigation bar includes the Hotwire logo and links for Hotels, Cars, Flights, and Vacations. The main content area features a large red envelope graphic. Inside the envelope, there is a white card with a gift icon, the text "1 DAY ONLY", "Your Surprise Savings!" in red, "– Email Exclusive –", and a red button that says "Find out now". At the bottom of the envelope, there is a line of small text: "Book by 11:59pm (PST) on 06/03/16; travel anytime. Minimum \$125 Hot Rate® Hotel booking."

The Beguiling Pursuit of More Information

- N.F. is a 69-year-old man with stage T1C prostate cancer. His prostate-specific antigen level is marginally elevated at 7.0 ng/ml, and biopsy reveals Gleason 6 cancer. Review of systems is otherwise remarkable only for shortness of breath on exertion (2 flights of stairs). Otherwise, he is in good health. A medical consultation documents chronic emphysema with moderate obstruction (FEV1 of 1000 ml, equivalent of 40% predicted). In this situation, would you recommend surgery or radiation therapy? :
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[For those choosing to obtain a medical consultation]: A medical consultation documents chronic emphysema with moderate obstruction (FEV1 of 1000 ml, equivalent of 40% predicted). In this situation, would you recommend surgery or radiation therapy?

Judgment Tendencies

- **Availability:** Tendency to judge likelihood of events by how readily available specific examples are in our memory
- **Anchoring:** Tendency to insufficiently adjust away from an initial anchor
- **Confirmation:** Tendency to seek and overweight confirming evidence
- **Overconfidence:** Tendency to be overconfident in our judgment abilities
- **Information Pursuit:** Tendency to weight information that we choose to pursue more heavily

Mitigating Biases and Decision Traps

AWARENESS!

Plus some
proactive thinking
and a healthy dose
of common
sense...



Mitigating Biases—the main key...

Be like a lawyer---

Make the opposing case!





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