



Systematic Traps and Biases in Professional Judgment: Insights from Research in Psychology

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The Emerging Science of Judgment

- Rapid change, increased complexity in business
 - Increased use of principles-based standards
 - Expanded use of subjective estimates in financials
- = Ever greater importance of professional judgment
on the part of accountants and auditors!

Fortunate coincidence: A critical mass of insight on human judgment has emerged



Ambitious goals for today



- Introduce a model—common vocabulary and framework
- Identify common pitfalls in applying the judgment model and explain importance of proactive “reframing”
- Identify and explain judgment biases, and how to mitigate their impact

Does Professional Judgment Really Matter?

Recent McKinsey study of more than 1,000 major business investments:

- “When organizations worked at reducing the effect of bias in their decision-making processes, they achieved returns up to seven percentage points higher. “

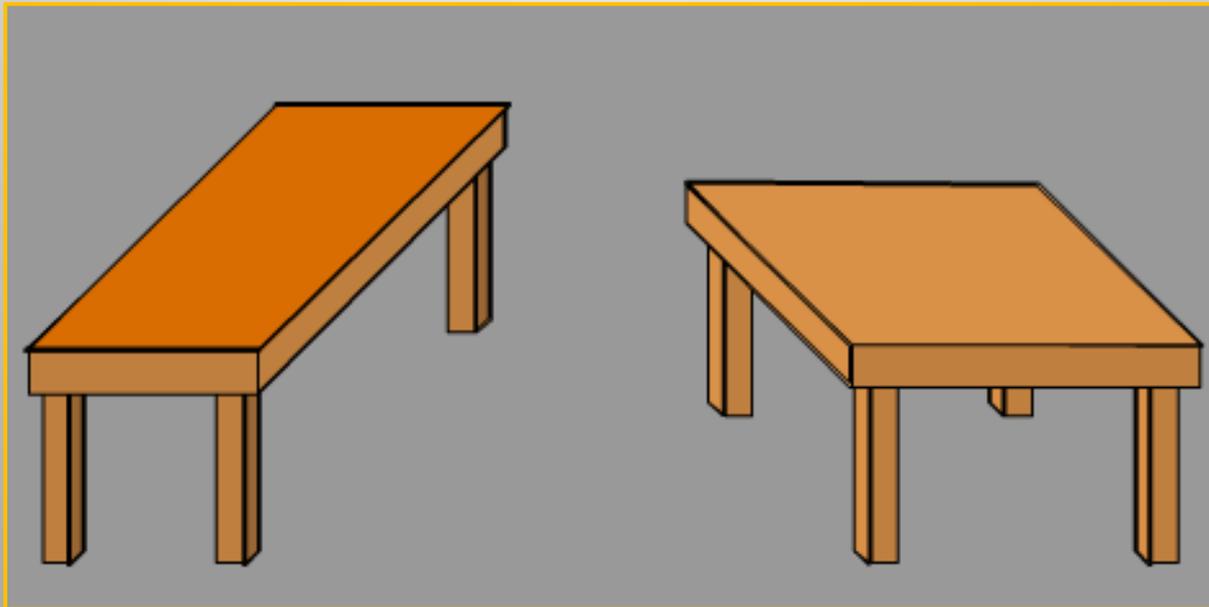
(“The Case for a Behavioral Strategy,” McKinsey Quarterly, March 2010.)

Can Professional Judgment be Developed?

Is good judgment a natural ability or a skill that can be developed?

- True or False: Either you have it or you do not...
- Good News!
 - Professional judgment can be learned and developed
 - You can accelerate the development of good judgment in others
 - A simple, shared model of “good judgment” is key
 - Even experienced leaders can improve!

Visual Perception

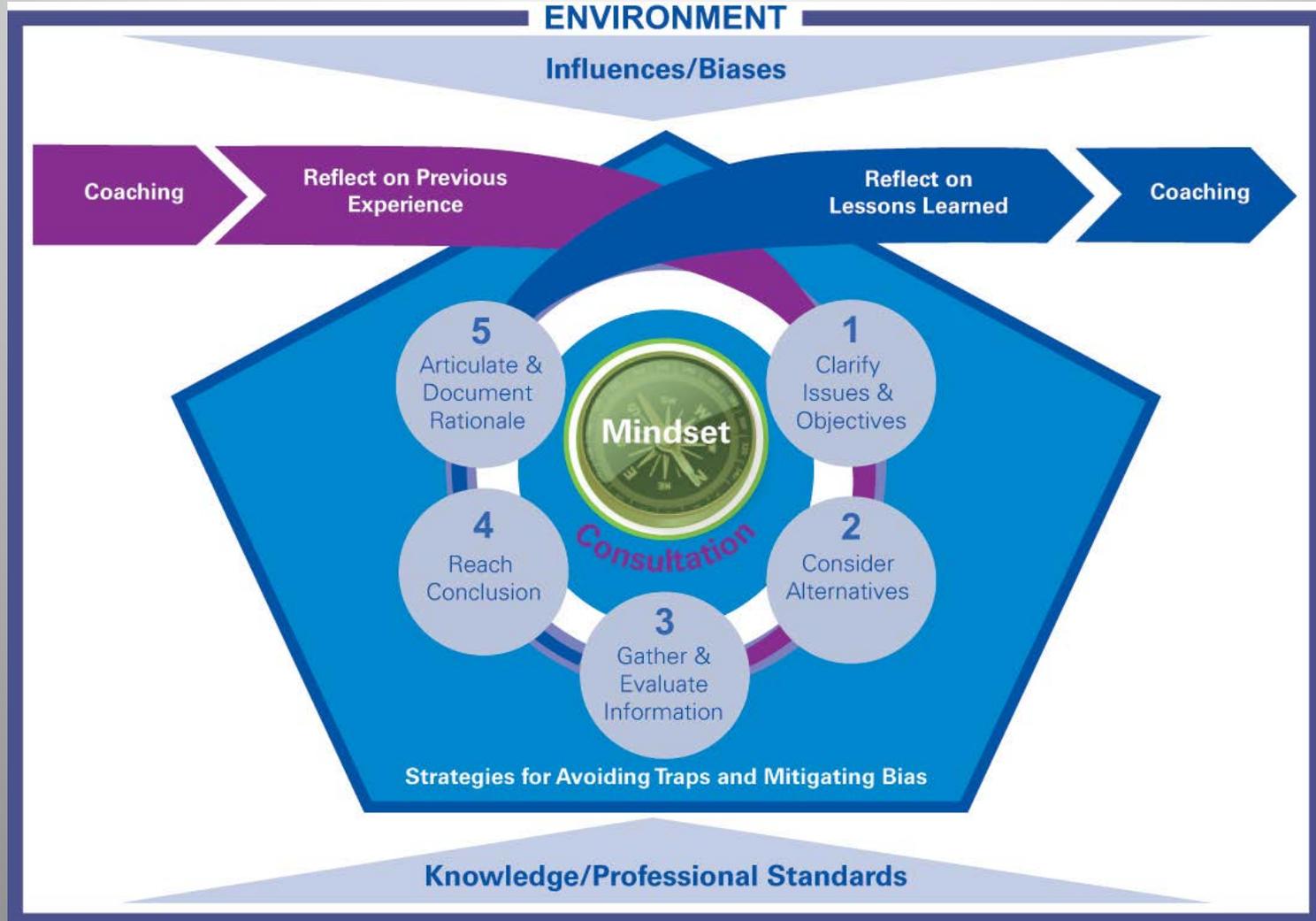


Professional Judgment:

The process of reaching a conclusion where there are a number of possible alternative solutions and uncertainty is involved.

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

The KPMG Professional Judgment Framework



Common Traps in Applying a “Simple” Judgment Framework

Guess what is the first trap...



Trap No. 1: Solving the Wrong Problem

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

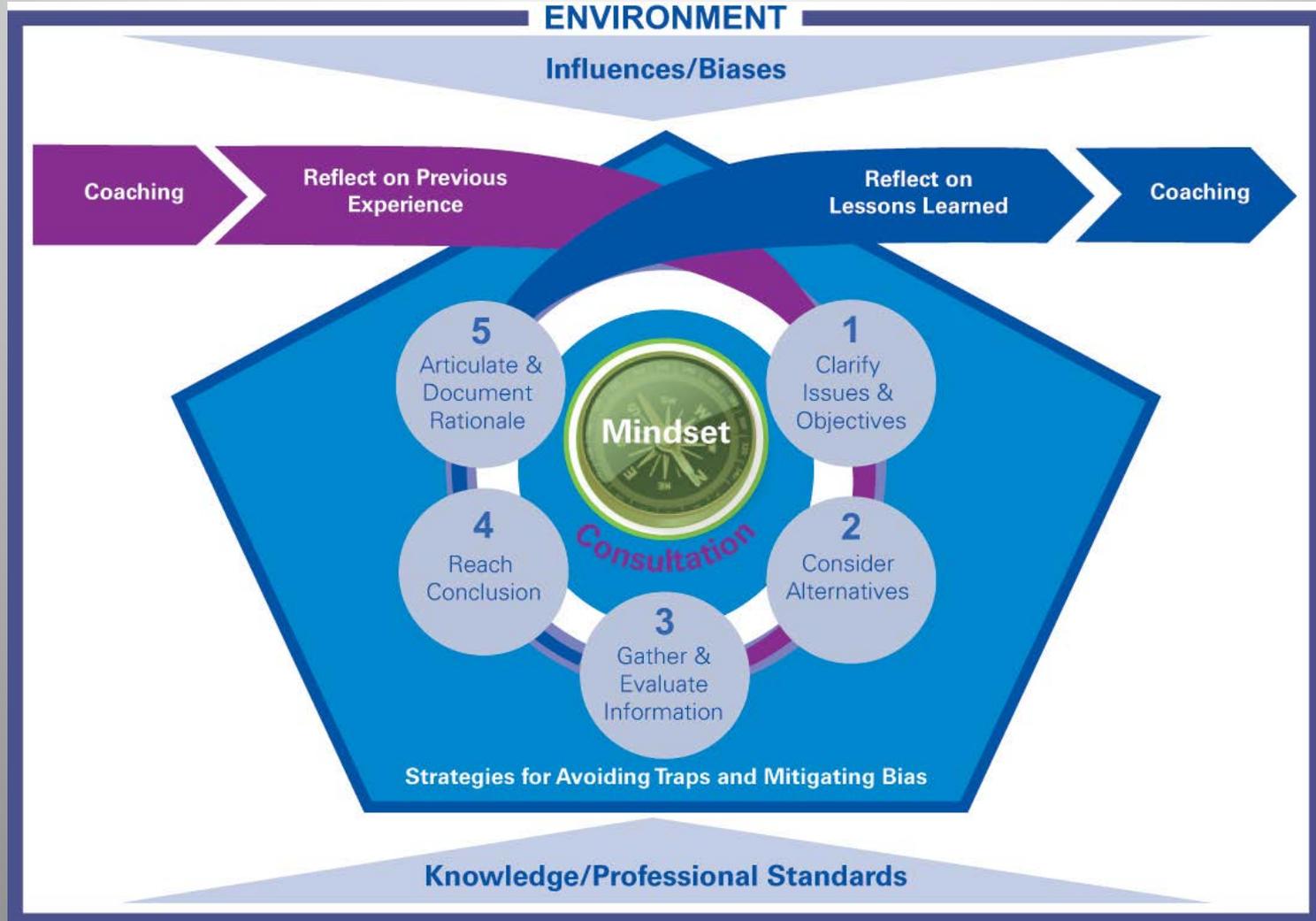
Trap No. 2: Decision Triggers

Identify the Problem

- What triggered this decision?

Example: The phone call...

The KPMG Professional Judgment Framework



Reaching a Conclusion in Teams

“If we are all in agreement on the decision – then I propose we postpone further discussion of this matter until our next meeting to give ourselves time to develop disagreement and perhaps gain some understanding of what the decision is all about.”

– Alfred P. Sloan, president, chairman, and CEO of General Motors Corporation



Step 5—Document & Articulate Rationale

How does one document “good judgment”?

- Following a good judgment process facilitates documentation of professional judgment, and...
- Knowing that one must articulate one’s rationale imposes discipline on the judgment process!



Framing Tendency

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

Discussing business on a bluetooth ear bud can be dangerous to your health...



Framing



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

The Power of a Frame

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



Systematic Judgment Biases

Heuristics—i.e. “mental shortcuts”

- Heuristics are very efficient
- Benefits generally outweigh the costs
- However, can result in biased judgment
- Example—crossing the street in New York...

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

Anchoring and Adjustment

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

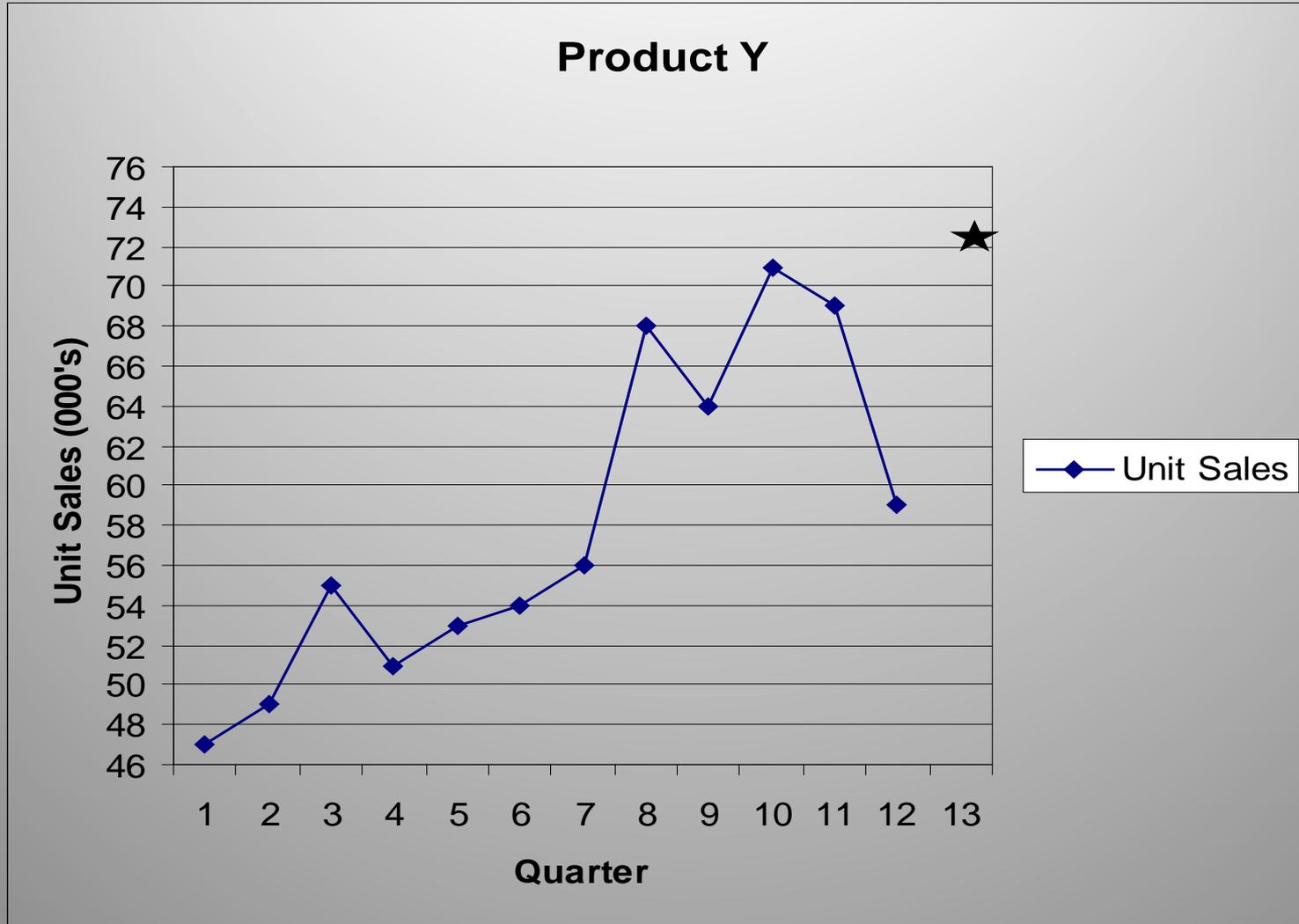
Anchoring and Adjustment—Real Estate



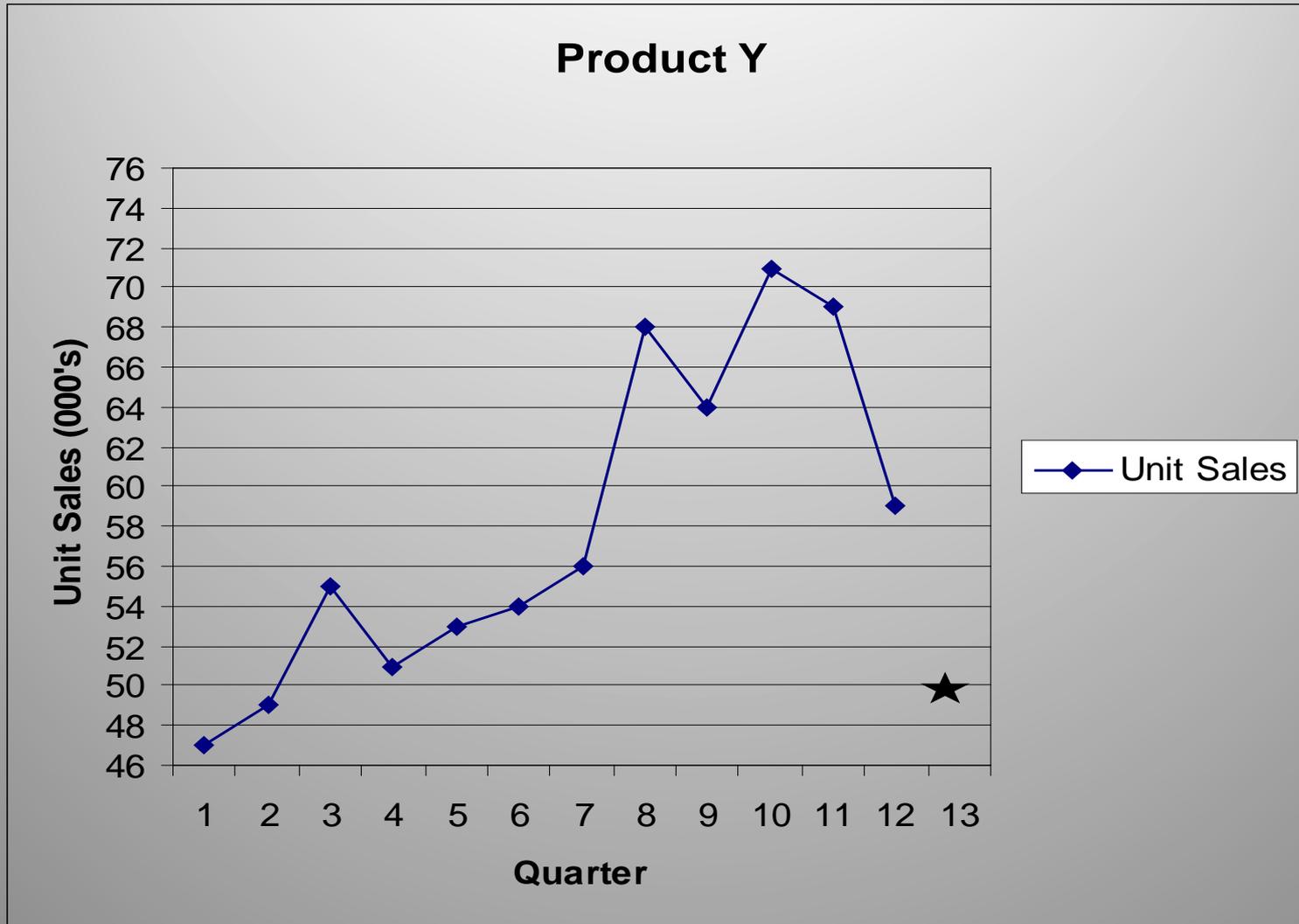
Anchoring and Adjustment—Real Estate



Anchoring and Adjustment—Auditors



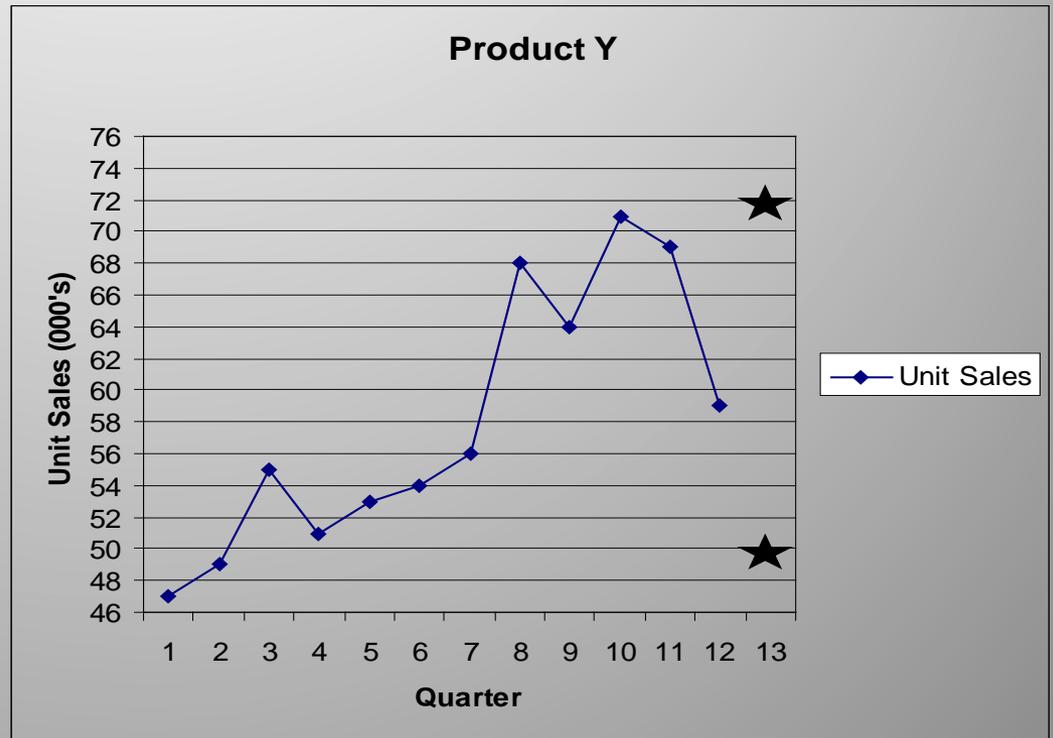
Anchoring and Adjustment—Auditors



Projecting a Trend

Audit Manager Estimates

- High star: 63,200
- Low star: 58,000



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.

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



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 among Experts

- “They couldn’t hit an elephant at this dist--”

Overconfidence among Experts

- “They couldn’t hit an elephant at this dist--”

General John B. Sedgwick--
Union Army Civil War
officer’s last words, uttered
during the Battle of
Spotsylvania, 1864



Overconfidence Results

<u>Group Tested</u>	<u>Information Type</u>	<u>(Percent Misses)</u>	
		<u>Target/Observed</u>	
Harvard MBAs	Trivia facts	2%	46%
Computer Co. Managers	General Business	5%	80%
	Company-specific	5%	58%
Physicians	Diagnosis of pneumonia	0-20%	82%

What's So Bad About Overconfidence?

Overconfidence Can Lead To:

- Taking on too many projects
- Over promising on deadlines
- Considering only one alternative
- Truncating information search or even skipping evidence gathering
- Snap judgments
- Avoidance or poor execution of judgment model

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

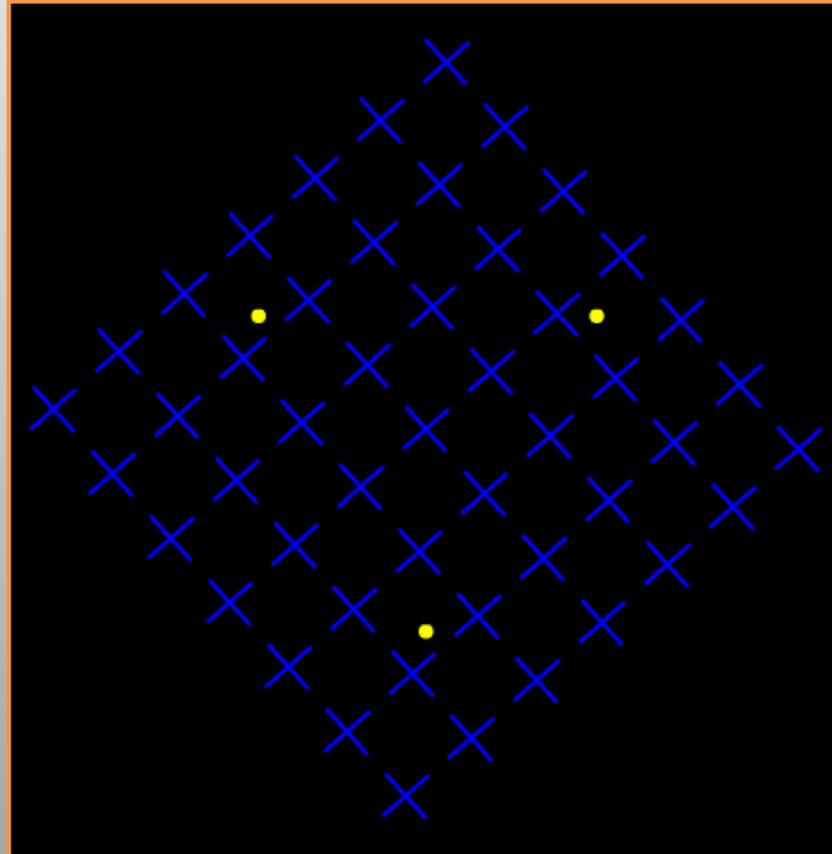
Mitigating Biases and Decision Traps

AWARENESS!

Plus a healthy
dose of common
sense...



Motion Induced Blindness



Mitigating Biases—the main key...

Be like a lawyer---

Make the opposing case!



Mitigating Biases—example approaches

- Confirmation bias: Seek disconfirming information...
- Anchoring bias: Consider alternative anchors, involve others not exposed to anchor...
- Availability bias: Pause to consider more than just most recent experience, determine base rates...
- Over-confidence bias: Engage in “pre-mortem thinking” -- imagine a bad outcome and determine possible causes...

Key Take-Aways

- A Professional Judgment Framework provides a practical model of a good judgment process and allows you to pinpoint where judgments can go awry.
- A shared framework allows for a common vocabulary and a shared understanding.
- Investing some time up front, especially in the first couple of steps in the judgment process, usually pays off.
- Watch out for common judgment traps like judgment triggers and the rush to solve, and be aware of possible judgment biases related to mental shortcuts!
- Effectively managing group judgment processes will allow you to enjoy the benefits of group judgments while avoiding common threats to good judgment in groups.
- Judgment can be improved by learning fundamental judgment concepts, but as with other skills, practice is needed!



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