



USC Marshall

Critical Thinking Initiative

How to Reduce Bias In Decision-Making

**A Part of the Comprehensive and Fully Integrated Framework for Critical Thinking at the
USC Marshall School of Business**

USC Marshall Critical Thinking Initiative



- The *USC Marshall Critical Thinking Initiative* is an on-going school wide effort to enhance our students' critical thinking skills in order to make them more successful problem solvers. Its key components include...
 - ✓ The 5 Step **USC-CT** Problem Solving Process which is designed to help students tackle ambiguous, ill-defined challenges.
 - ✓ The **START** Concept Analysis which is designed to teach fundamental concepts/formulas that are utilized within the USC-CT Process.
 - ✓ **Learning Modules** which are designed to enhance specific skills such as how to reduce biases, how to enhance creativity, and how to evaluate claims & evidence.
- This lesson focuses on **Reducing Biases in Decision Making**.



Reducing Biases

(Note: This document corresponds to the related video which provides a brief introduction to the subject. More in-depth coverage will occur in supplemental readings and classroom exercises.)



Reducing Biases

- Objective: This module is designed to help students reduce and even eliminate on-going biases that hamper successful decision-making.
- Approach: The approach surveys an array of biases to help students recognize them, while outlining various techniques to help students reduce and hopefully even eliminate them.

Hindsight Bias
Overconfidence
Anchoring Bias
Selective Perception
Confirmation Bias
Framing Bias
Availability Bias
Sunk Costs & Constraints
Self-Serving Bias

Session Goals



- Recognize cognitive biases that influence your thinking and decision making
- Learn how to overcome these biases in order to make better decisions or complete stronger analysis
- Understand why it matters

Decision Making



- What do we mean by decision making?
 - When problems or issues arise, we need to make a decision about what to do
 - We engage in a decision making process to come to the action we want to take
 - During the process, we often use “rules of thumb” or heuristics or shortcuts
 - **We make better decisions using critical thinking**

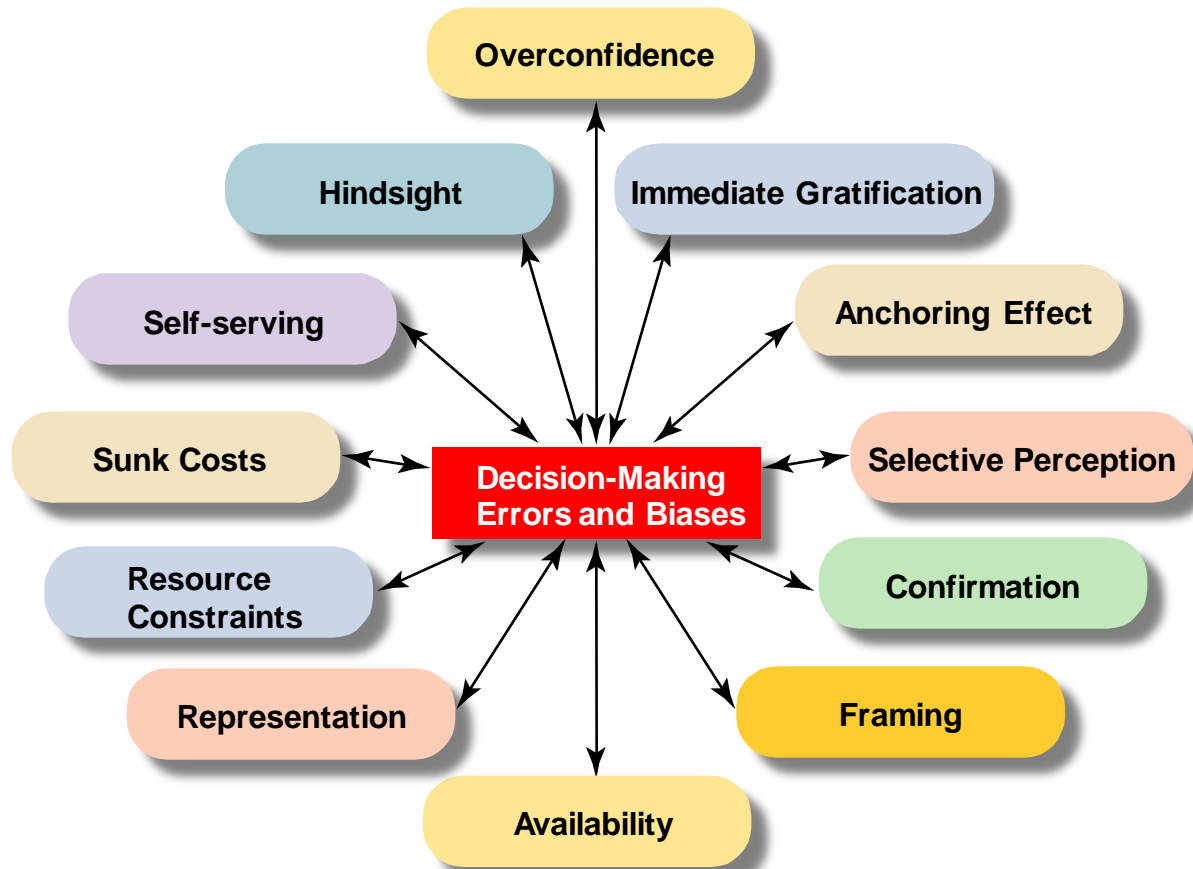
Cognitive Biases



- What is a bias?
 - We tend to believe or seek out information to preserve our opinions or beliefs
 - This can cause a gap in how we reason and how we should reason
 - This causes us to make bad decisions



Decision Making Biases



Overconfidence Bias



- When we are given factual questions and asked to judge the probability that our answers are correct, we tend to be far too optimistic.



Criminal or Movie Star?



Anchoring Bias



- Fixate on initial information and fail to adjust for subsequent information.
- This also happens when we are blinded by first impressions or influenced by first impressions, ideas, prices, or estimates relative to info received later.



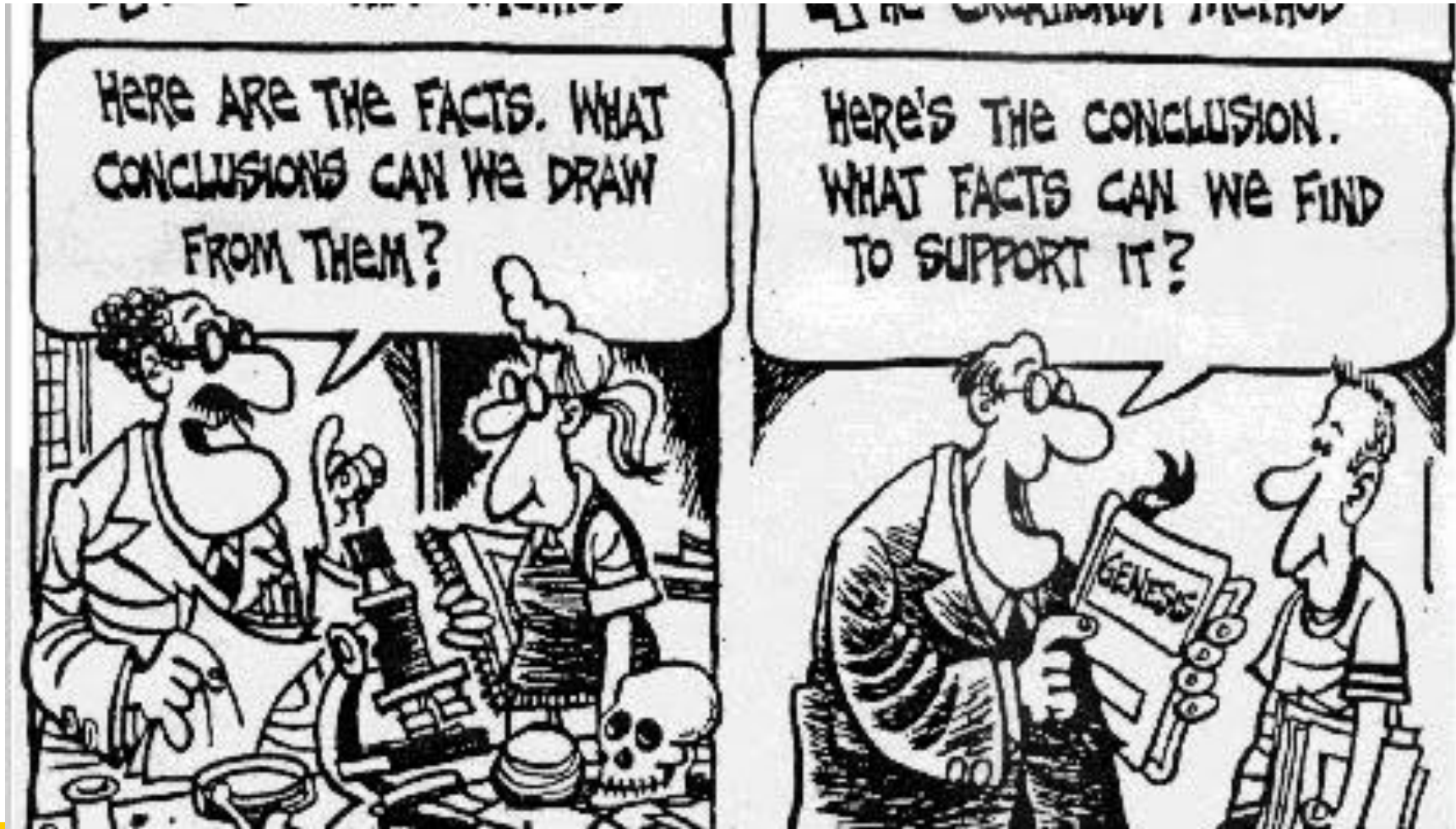


Selective Perception



- See things from our own personal perspective
- Organize and interpret events/information based on this perception
- Influences what we pay attention to and the problems we identify, and the alternatives we develop or consider.
- **CONFIRMATION BIAS** is a specific case

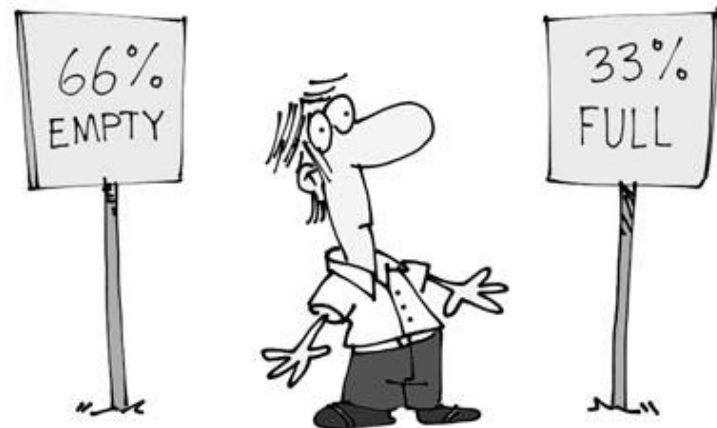
Confirmation Bias



Framing



- Tendency to be influenced by the way a problem is formulated even though it should not affect the solution.



Availability Bias



- Rely upon knowledge that is readily available rather than examine other alternatives or procedures.
- The most recent and memorable information is given preference.

Sunk Costs & Constraints



- Tendency to “honor” already spent resources that are not affected by present or future decisions.
- Economists would label this behavior “irrational” – it is inefficient because it misallocates resources by depending on information that is irrelevant to the decision being made.
- Throwing good money after bad.

Self Serving Bias



- Take personal credit for success while blaming outside sources for our failures.
- Selecting information or making decisions that further our own self-interests instead of the organization or team.

Working in Groups

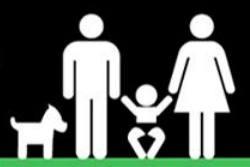


- Conformity & Group Think
 - Group Shift
 - Escalation of Commitment
-
- Use a clear decision making process like USC-CT to reduce these errors.





US families lost
\$11 trillion
in wealth in



2008



2008 Financial Meltdown



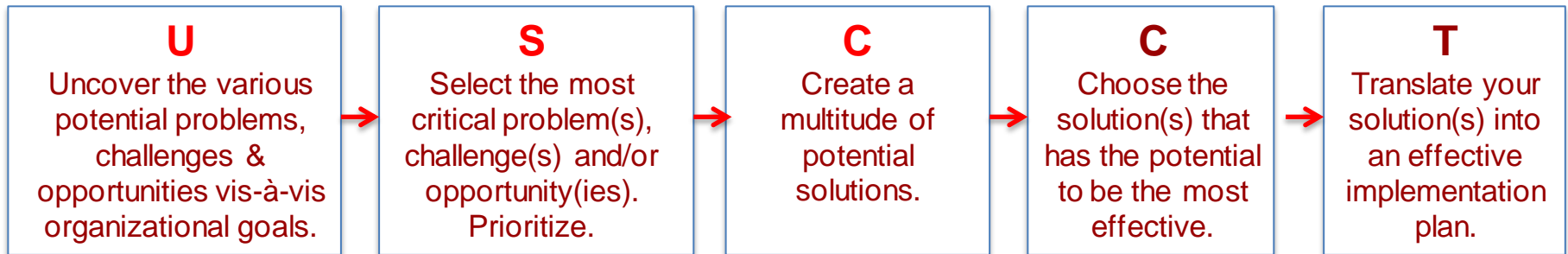
- **Selective Perception & Anchoring – Merrill Lynch**
 - Housing boom, Lehman Bros. mortgage-based product success
- **Overconfidence Bias – Many players**
 - Boom will continue, Banks happy, Homeowners happy
- **Confirmation Bias – Financial Analysts & Traders**
 - Focused on the good news and upside, ignored bad news
- **Availability Bias & Self-Serving Bias**
- **Groupthink – Merrill Lynch**
 - No one spoke up, Dissenters were silenced



Reducing Biases

- ✓ Use a PROCESS
- ✓ Start with a clean slate
- ✓ Challenge the status quo
- ✓ Seek multiple perspectives
- ✓ Search for more information & data
- ✓ Play Devil's Advocate
- ✓ Reflect on your own views & values

Working the USC-CT Model



With each step, check and challenge your thinking.
What biases might be getting in the way?
Am I limiting the possibilities?

Kahneman's 3 Key Questions



- Is there any reason to suspect the people making the recommendation of biases based on self-interest, overconfidence, or attachment to past experiences? Realistically speaking, it is almost impossible for people to not have these three influence their decisions.
- Have the people making the recommendation fallen in love with it? Again, this is almost an inevitability because, in most cases, people wouldn't make the recommendation unless they loved it.
- Was there groupthink or were there dissenting opinions within the decision-making team? This question can be mitigated before the decision-making process begins by collecting a team of people who will proactively offer opposing viewpoints and challenge the conventional wisdom of the group.

Most Importantly...



BE AWARE!

Keep in mind that you can't escape these biases but if you are **aware of them** and **challenge them**, you will become a stronger critical thinker and better decision maker overall!



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Recap

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Check them all out!