



DATA LITERACY & DATA INTUITION: MAKING SMARTER DECISIONS WITH DATA

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Data Are Not Insights



Understanding Your Psychological Biases in Decision Making



Data-Driven Decision Making



How to Ask Data-Driven Questions



How to Evaluate Data Integrity



Creating Richer Data-Driven Dialogue

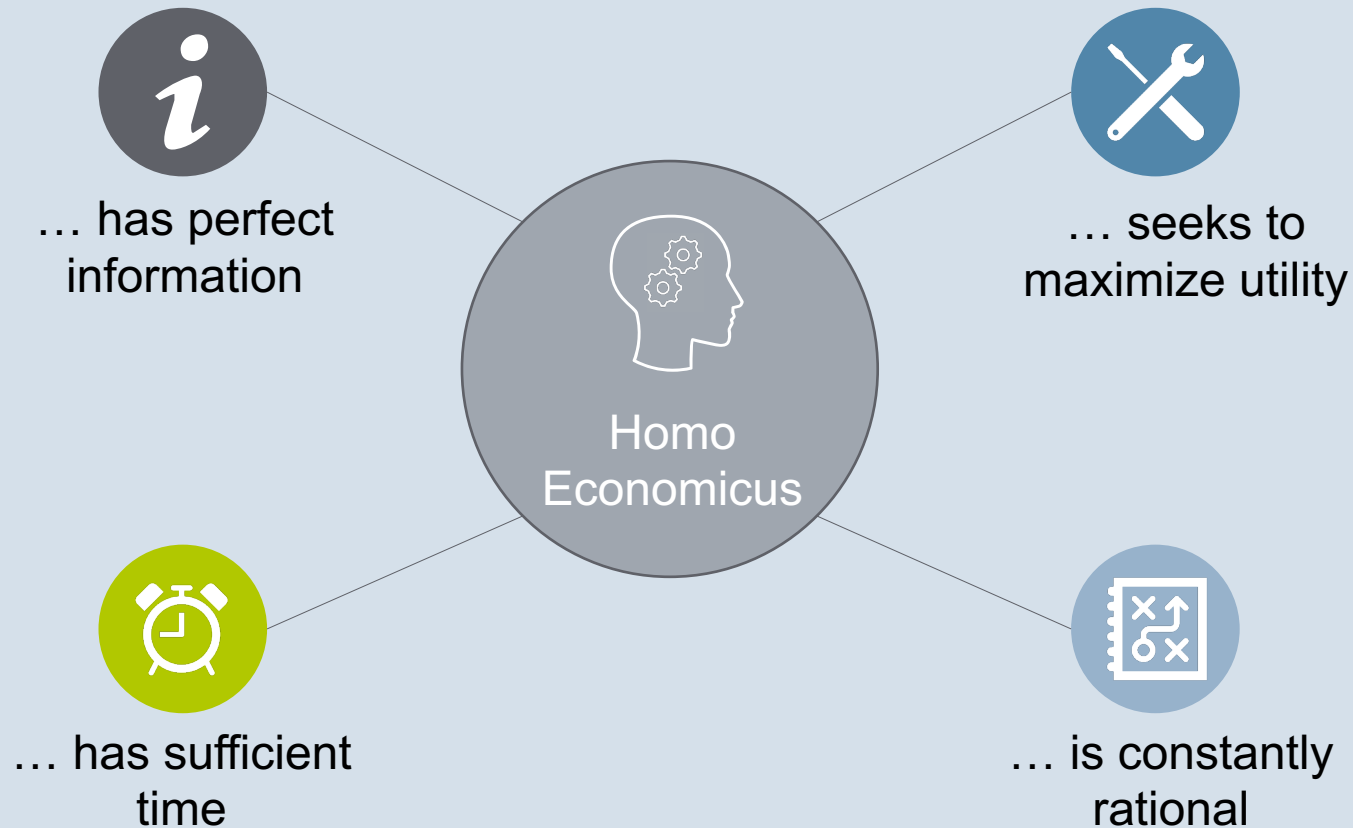


The Art of Guestimating – The Fermi Method



Emerging Areas in Data-Driven Decision Making

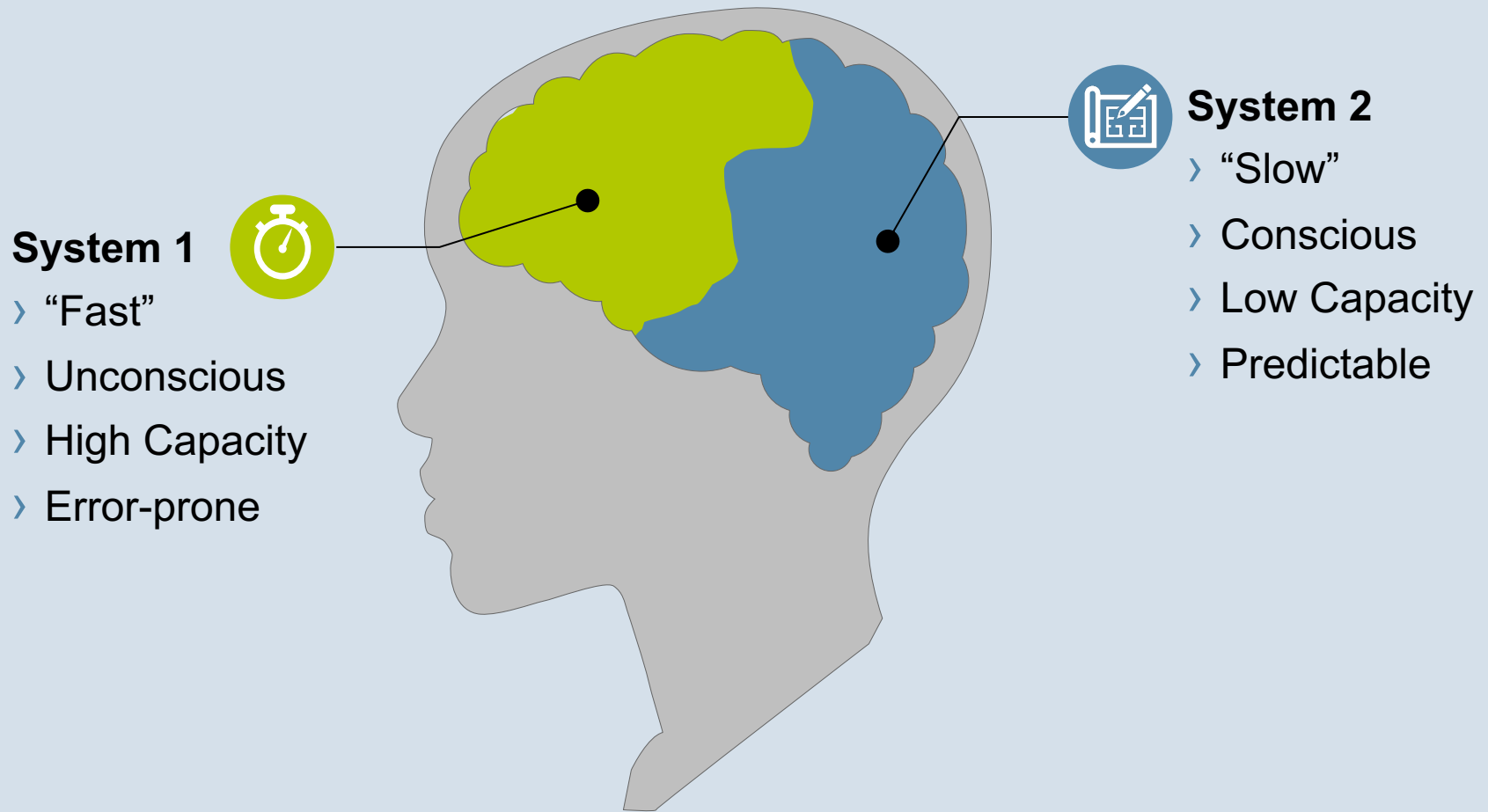
Rational Decision Making



A Quick Test:

$$17 \cdot 24 = ?$$

Dual Process Cognition



Cognitive Biases





01 Framing Effect

› Our choices depend on how different options are framed

02 Overconfidence

› Overestimation of one's actual performance

03 Confirmation Heuristic

› Tendency to search for information in a way that confirms one's prior beliefs

04 Self-serving Bias

› Habit to take credit for positive effects, but blaming outside factors for negative events



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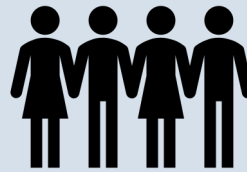
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Cognitive Biases: Framing Effect

Program A:

200 people will
be saved

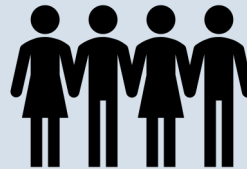


Group 1

Program B:

1/3 chance all 600
people will be
saved, 2/3 chance
no one will be saved

400 people will
die



Group 2

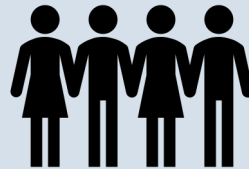
1/3 chance
nobody will die,
2/3 chance all 600
people will die

Cognitive Biases: Framing Effect

Program A:

200 people will
be saved

72%



Group 1

Program B:

1/3 chance all 600
people will be
saved, 2/3 chance
no one will be saved

28%

400 people will
die

22%



Group 2

1/3 chance
nobody will die,
2/3 chance all 600
people will die

78%



- 01 **Framing Effect**
› Our choices depend on how different options are framed
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Cognitive Biases: Overconfidence

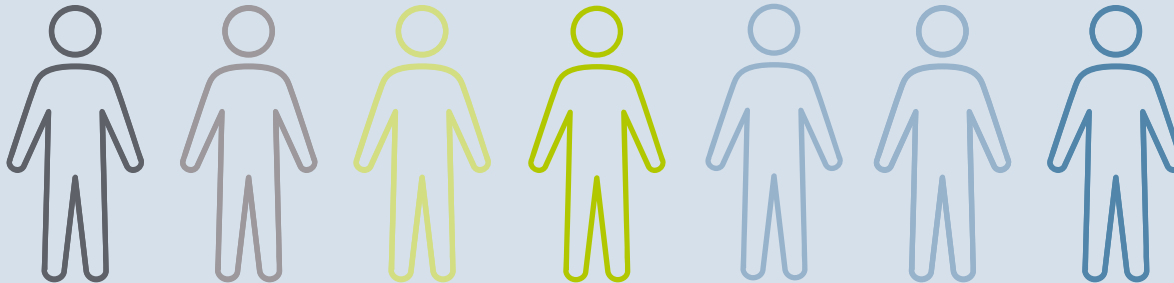
“My estimations are correct ... I do not need to rethink them”

“I do not need to learn ... I am skilled enough”

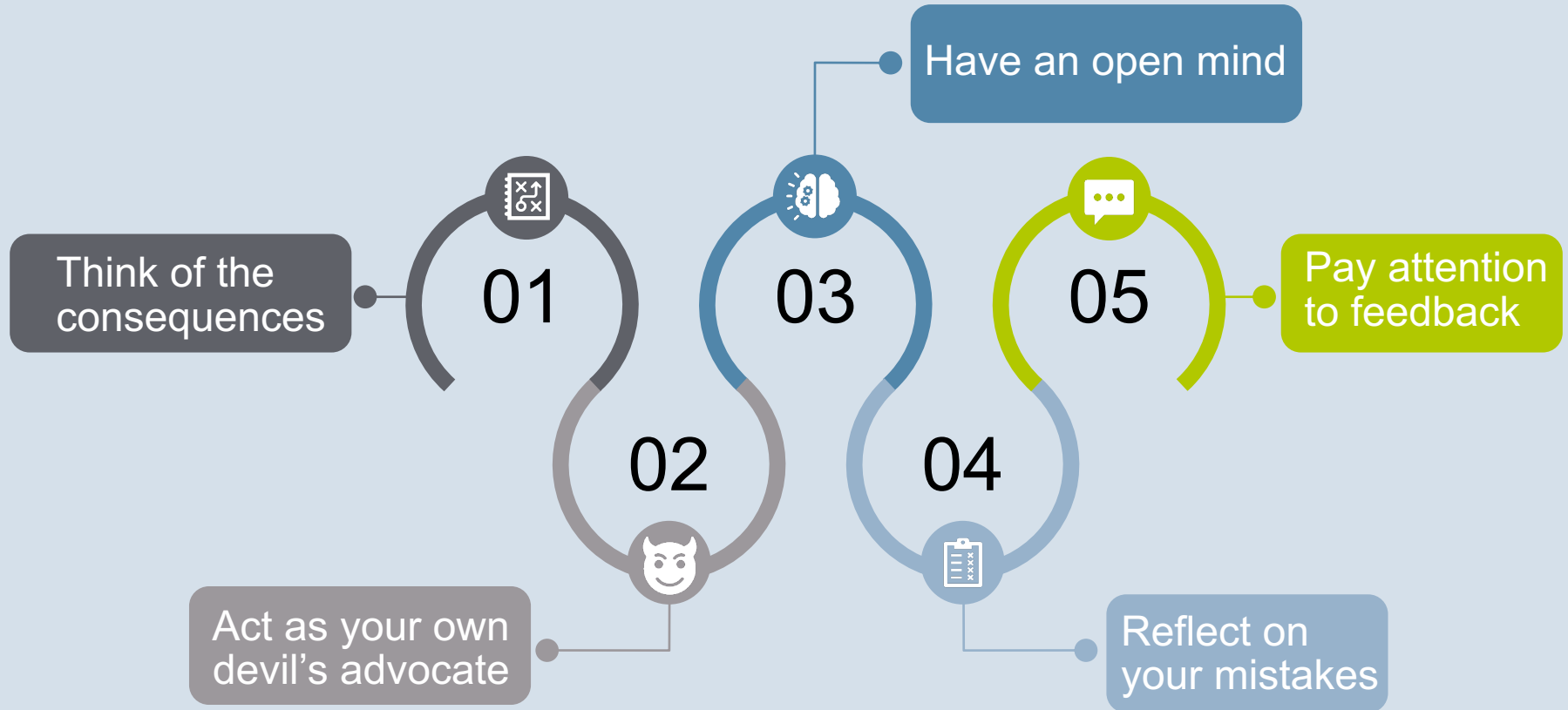
“I can definitely do that”

“No, I don’t need to write that down”

“I am better than experts”



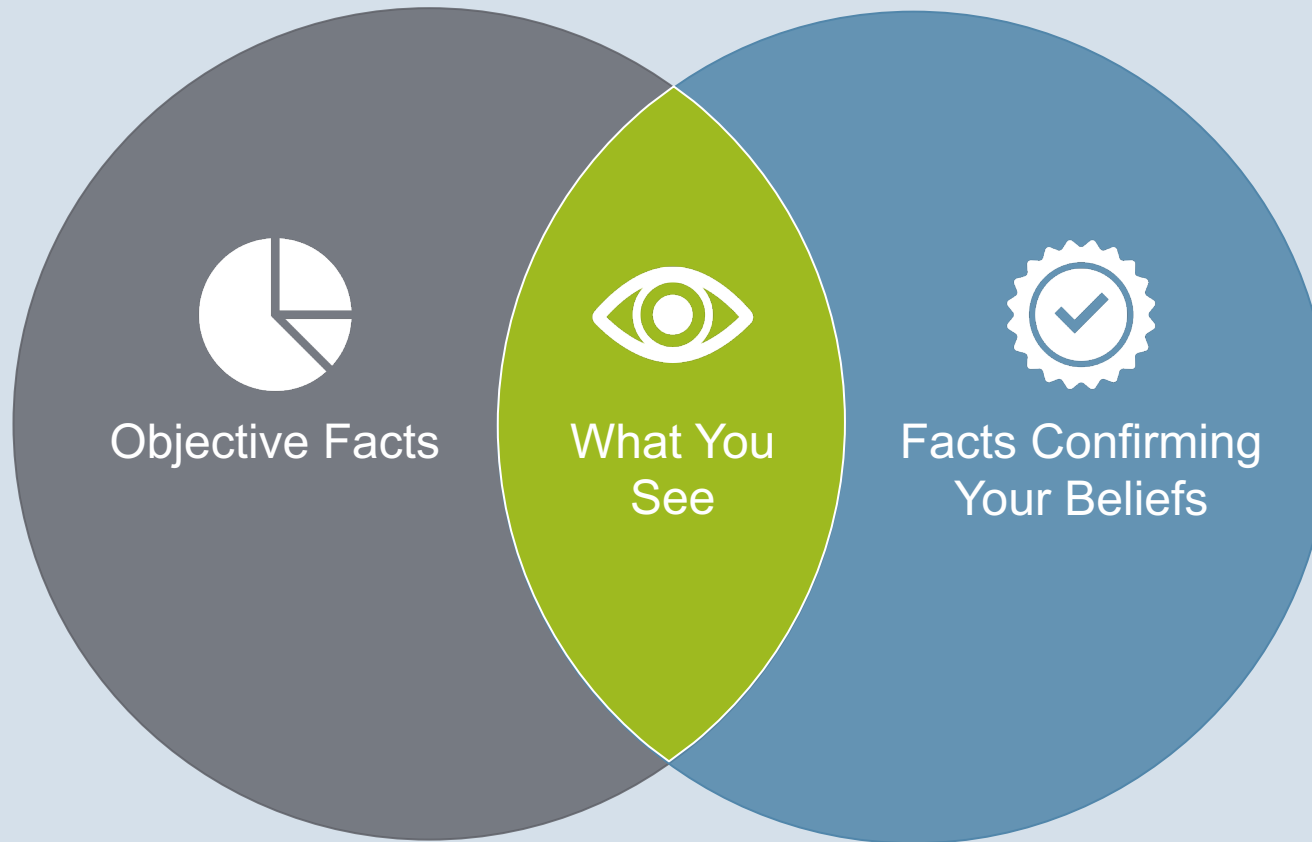
Cognitive Biases: Overconfidence





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Cognitive Biases: Confirmation Heuristic





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Cognitive Biases: Self-serving Bias

