



DATA LITERACY & DATA INTUITION: MAKING SMARTER DECISIONS WITH DATA

PROF. DR. FLORIAN STAHL



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

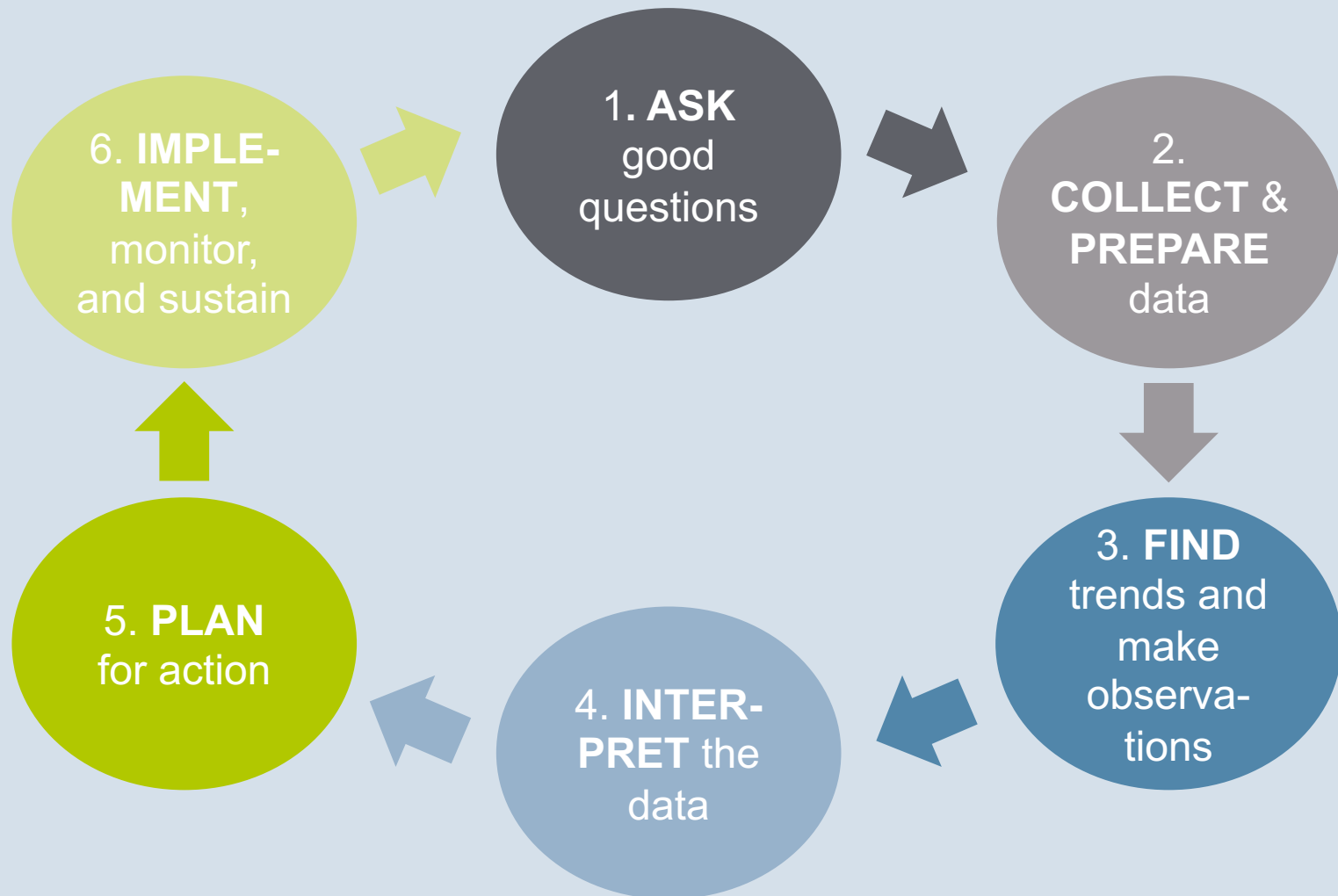


The Art of Guestimating – The Fermi Method



Emerging Areas in Data-Driven Decision Making

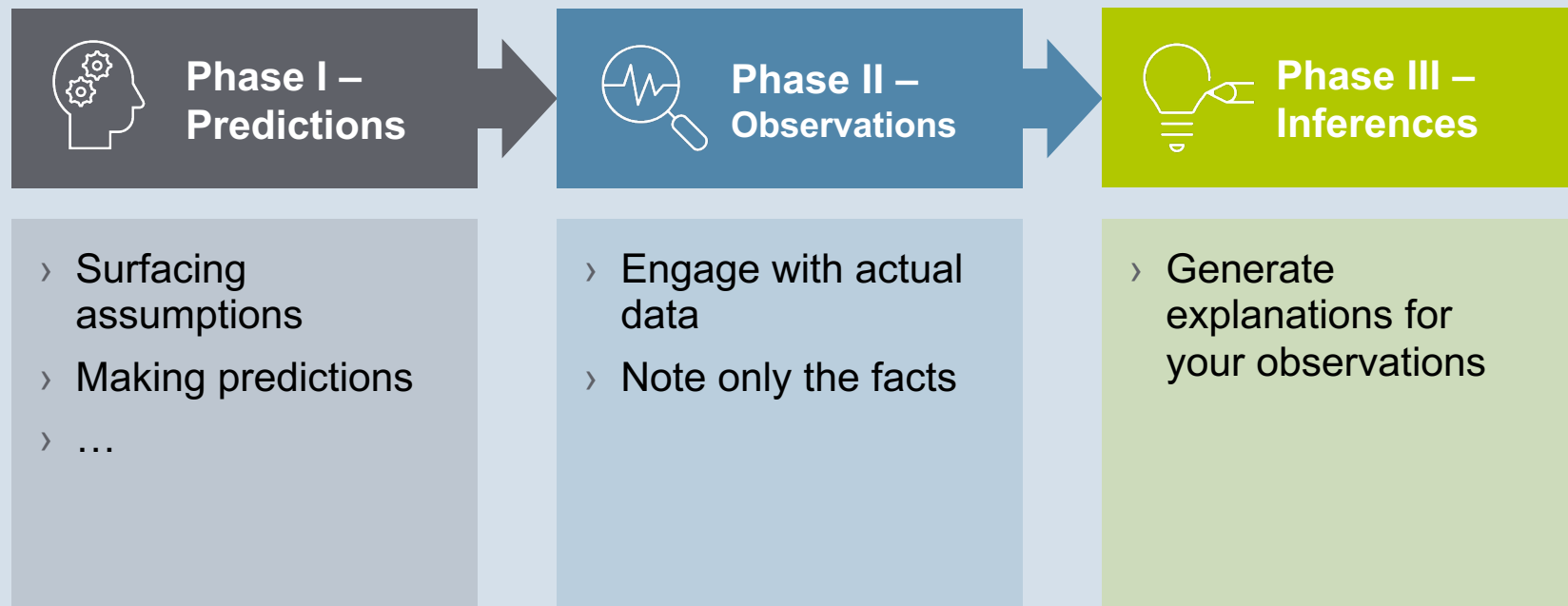
Data Driven Dialogue – an Overview



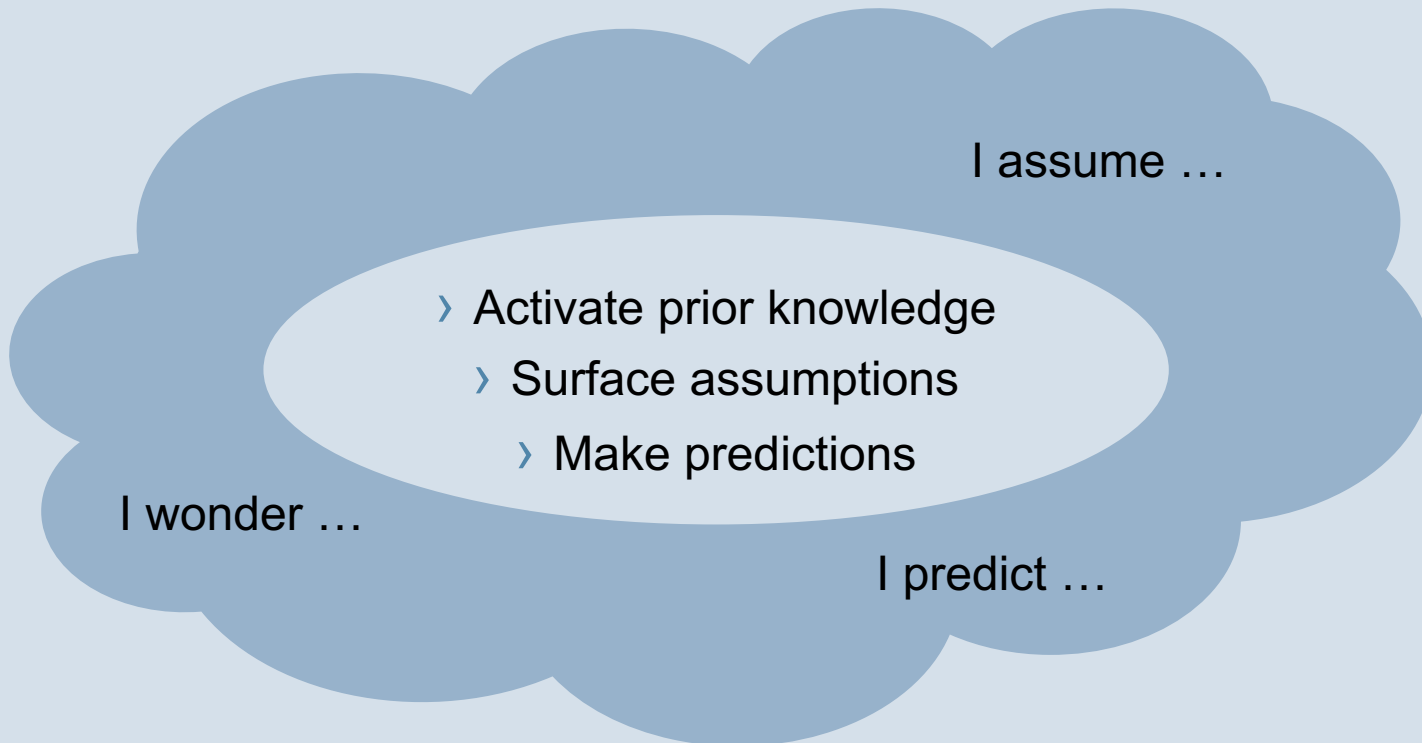
Data Driven Dialogue – What is Needed?



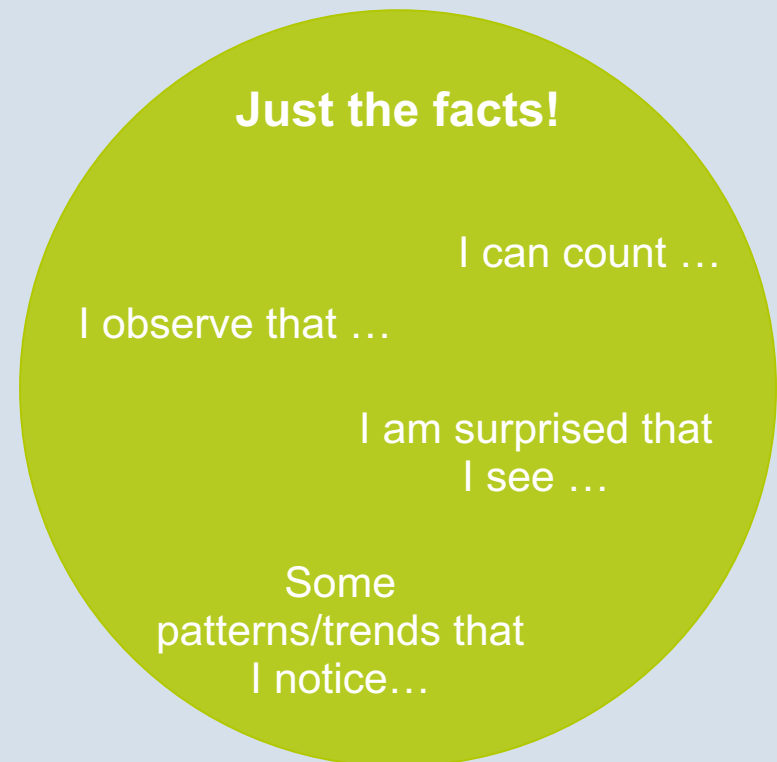
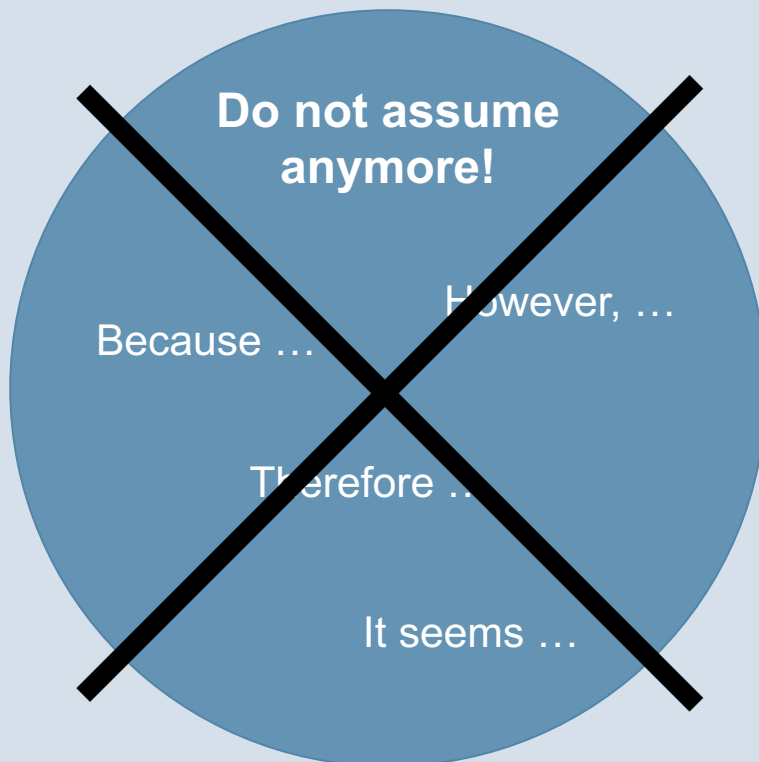
The Three Phases of Data Driven Dialogue



Data-Driven Dialogue – Phase 1



Data-Driven Dialogue – Phase 2



Data-Driven Dialogue – Phase 3



Generate multiple **explanations** for your observations



Identify additional data to **confirm** or **contradict** your explanations

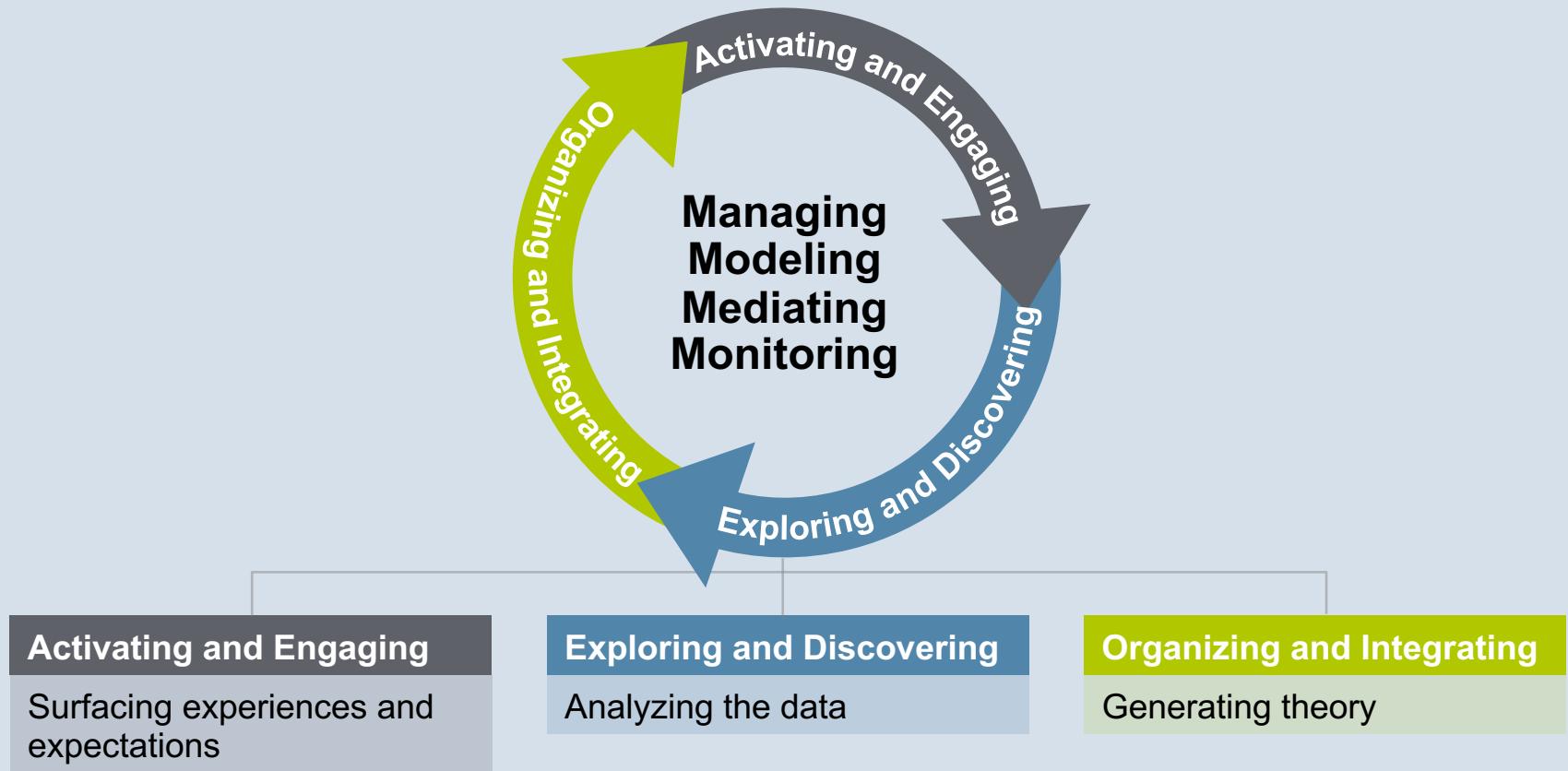


Propose **solutions/responses**



Identify data needed to **monitor implementation** of your solutions/responses

The Collaborative Learning Cycle



The Collaborative Learning Cycle – Phase 1: Activating and Engaging

Tips for success:



Distinguish between predictions and assumptions.



Develop predictions and related assumptions concurrently.



Record predictions and their related assumptions.



Record predictions on a facsimile of the data display.



If group members do not agree on their predictions or assumptions, record more than one set of predictions and their related assumptions.

The Collaborative Learning Cycle – Phase 2: Exploring and Discovering

Tips for success:



Provide time to orient to the data displays before talking.



Develop a sequence for exploration and designate a starting point.



Apply structures and protocols to balance participation.



Establish a public recording protocol.



Chart observations in language that is concise and specific.

The Collaborative Learning Cycle – Phase 3: Organizing and Integrating

Tips for success:



Study success.



Generate multiple theories of causation.



Seek calibrating data that are in existing archives.



Generate multiple theories of solution.



Make sure goals are clear and measurable.