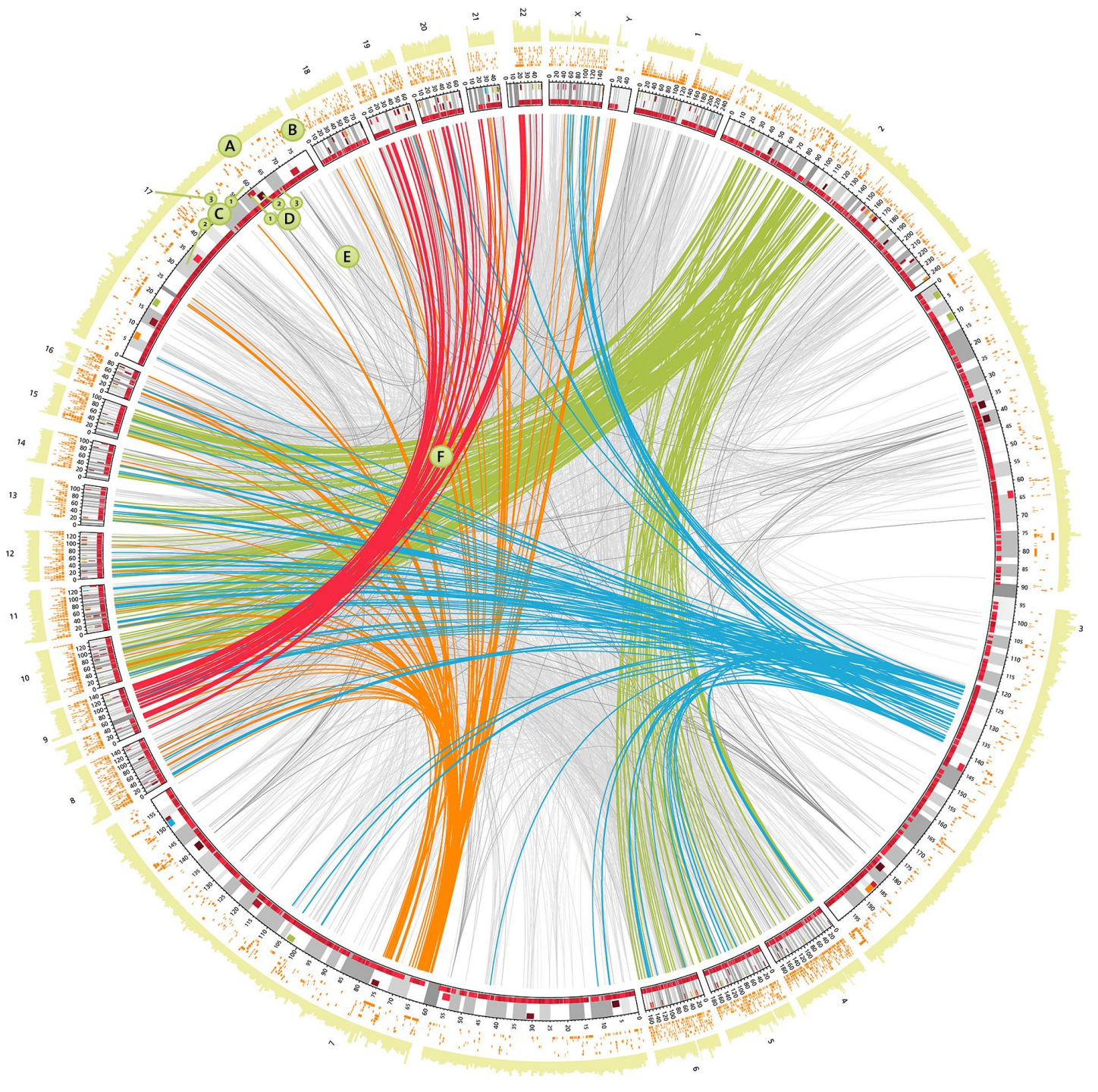
Design Thinking

Data Science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Most Data Science projects go nowhere

BIG DATA // BIG DATA ANALYTICS

NEWS

2/2/2015
09:40 AM

Big Data Success Remains Elusive: Study

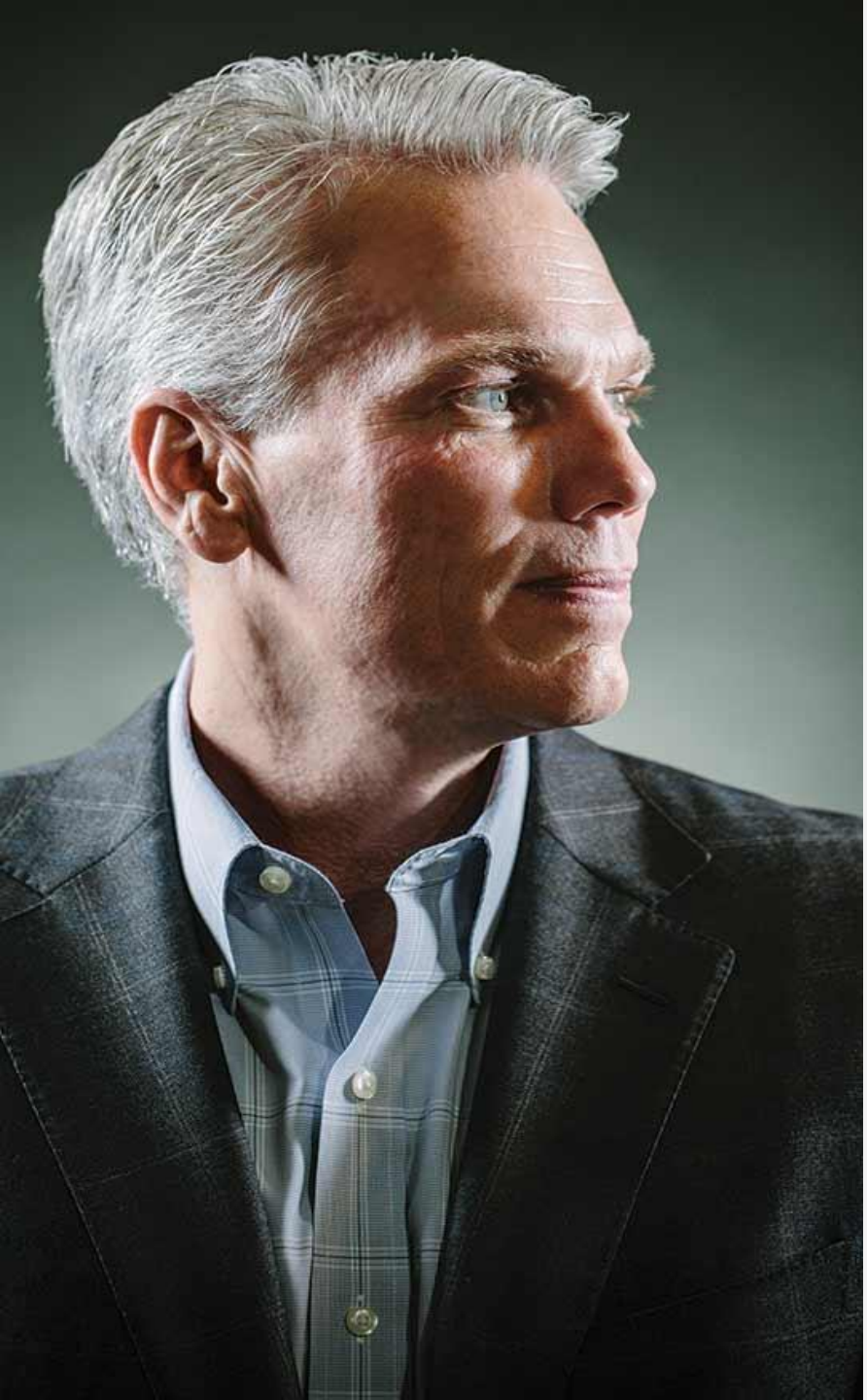
Just over a quarter of organizations say their big data initiatives are a success, according to a recent Capgemini study. So why are three of four unsuccessful?

Jeff Bertolucci
News

Connect Directly

Nearly eight out of ten organizations have big data projects underway, but only 27% describe their efforts as "successful," and just 8% as "very successful." But despite this dim view of their data-driven efforts thus far, 60% of executives surveyed recently by consulting firm

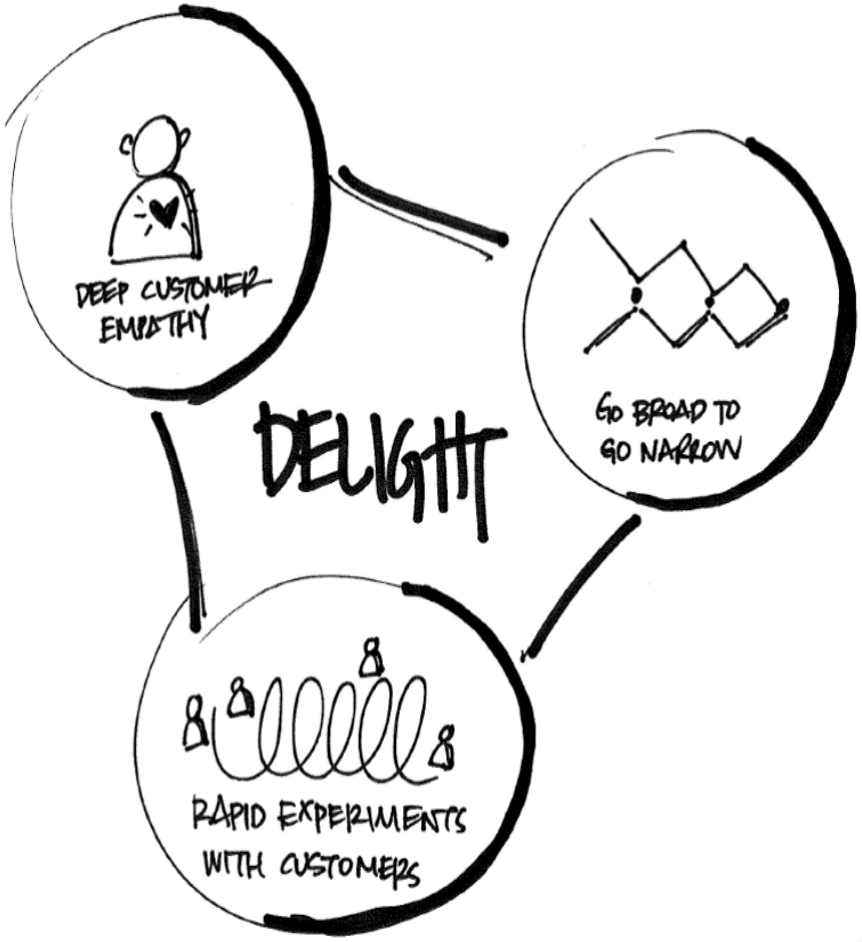
What a waste



“ We’ve challenged everyone who works for us—even our lawyers and accountants—to think deeply about how design should be part of their jobs.”

CEO Brad Smith
Harvard Business Review
January 2015

Design for Delight



“ Design for Delight articulates Intuit’s approach to design thinking, based on deep customer empathy, idea generation, and experimentation.

D4D provides the entire company with a common framework for building great products.”

CEO Brad Smith
Harvard Business Review
January 2015

Innovation Catalysts

What is a Data Scientist?

Data Science products

Analysis

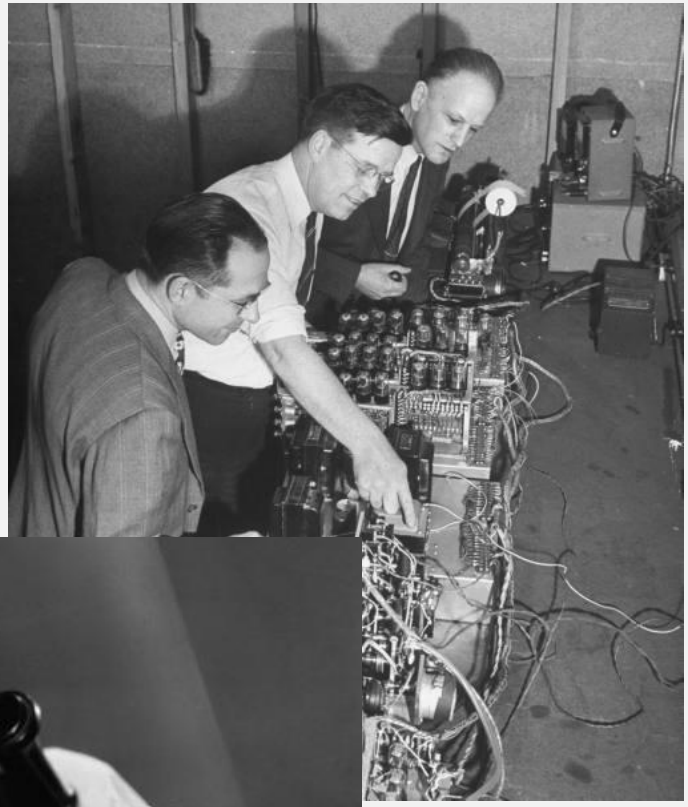
Decision Support System

Decision Engine

Data Science customers

Consumers

Engineering

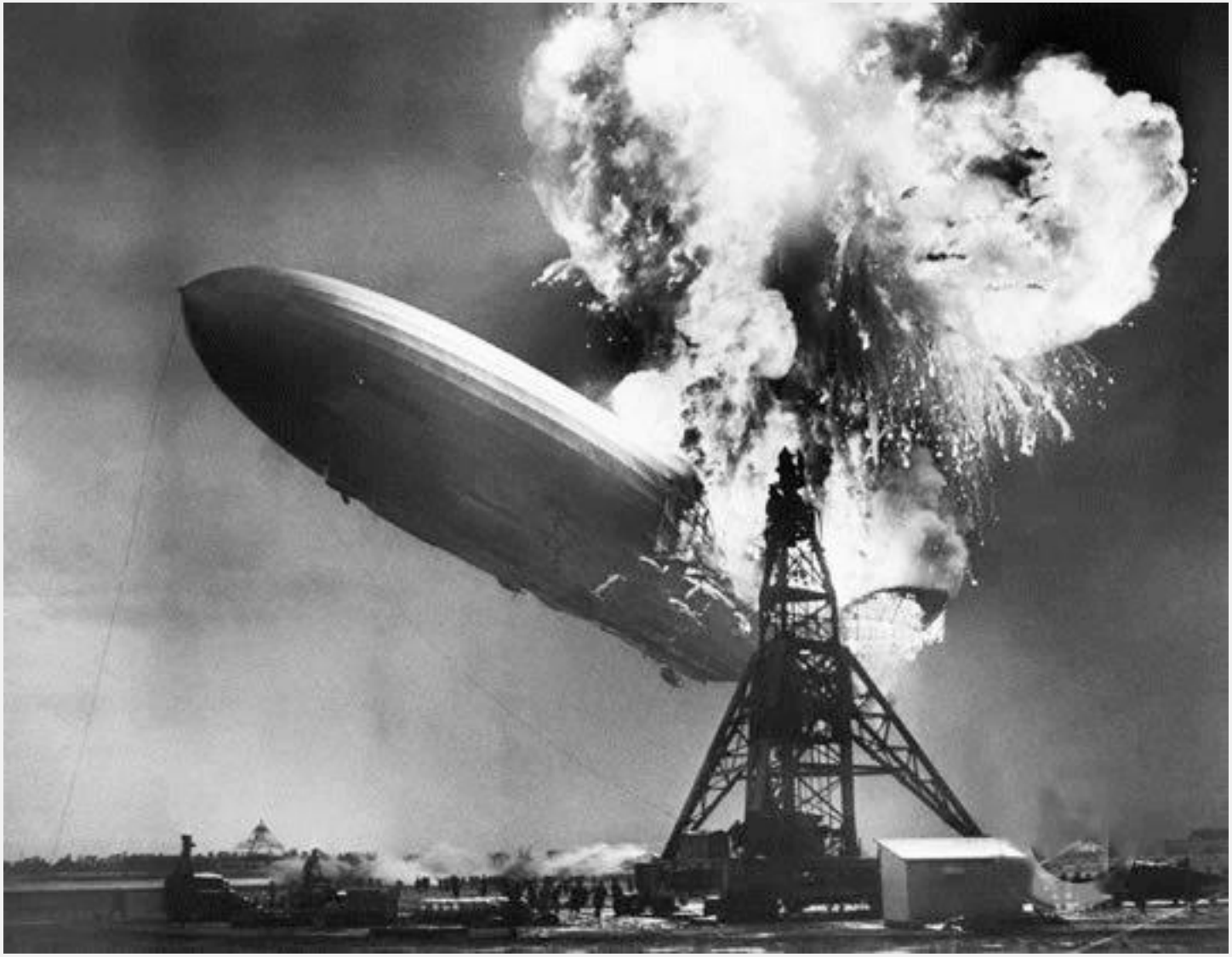


Business

Data Science as exploring the unknown

Design Thinking raises the odds of success

Top Ten Data Science failure modes



10. Behave like a stereotype

Deference

Condescension

Obliviousness

9. Don’t ask uncomfortable questions

8. Don’t map the business processes

7. Ignore the emotional landscape

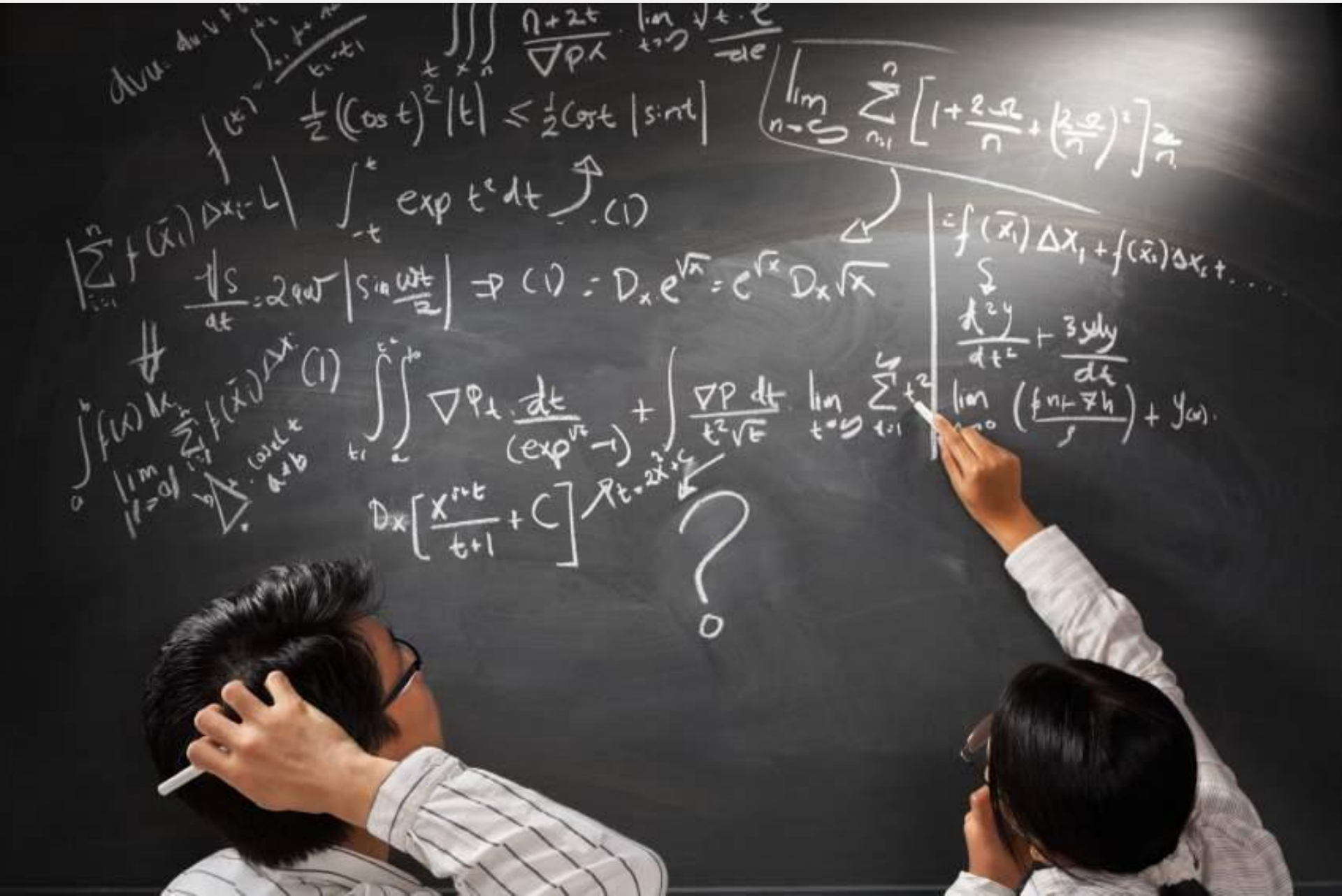
6. Just start hacking away

5. Go radio silent

4. Reinvent the wheel

3. Don’t build prototypes

2. Use an uninterpretable algorithm

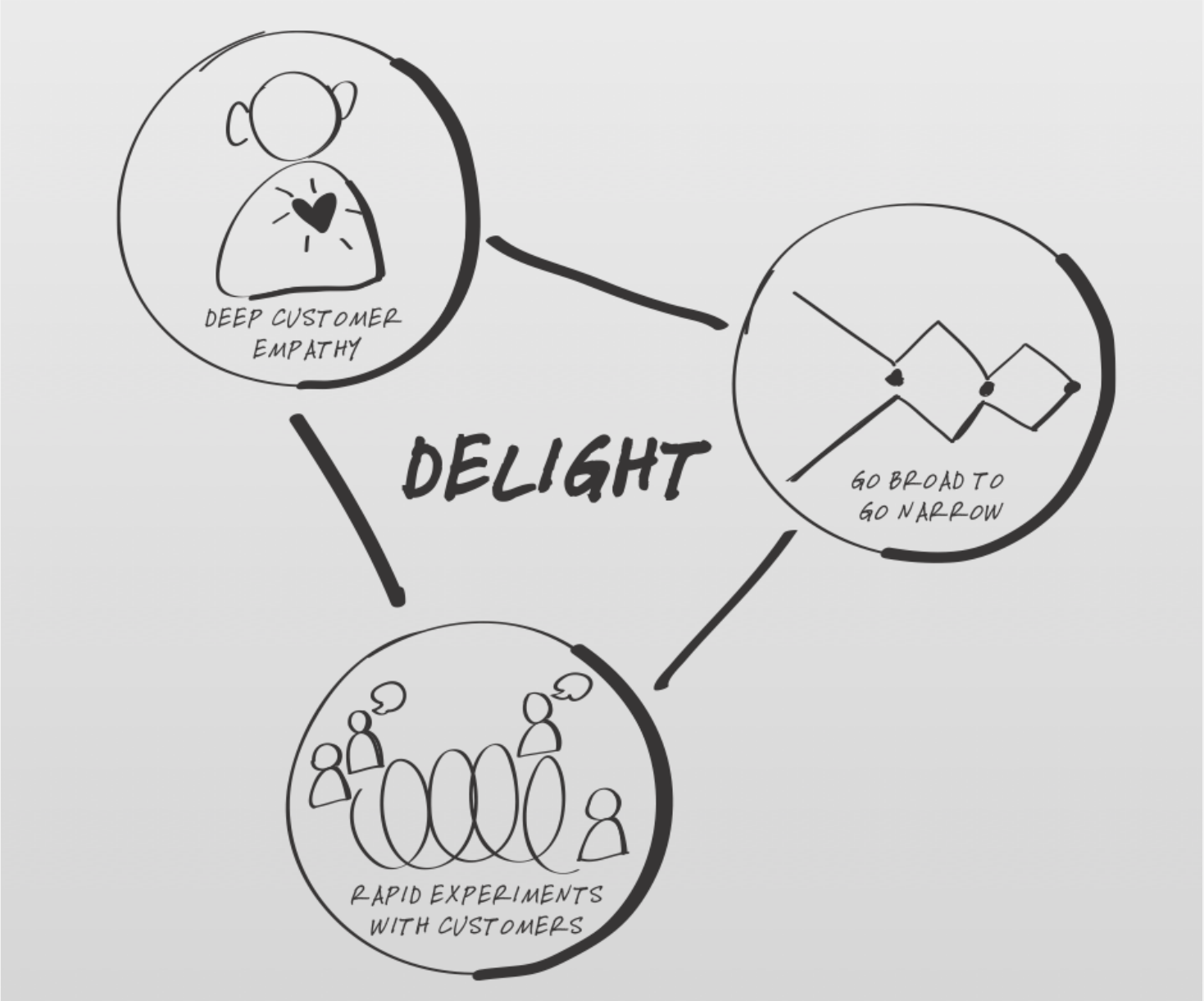


1. Don’t worry about what happens next

So many ways to fail...

The Data Scientist as Design Thinker

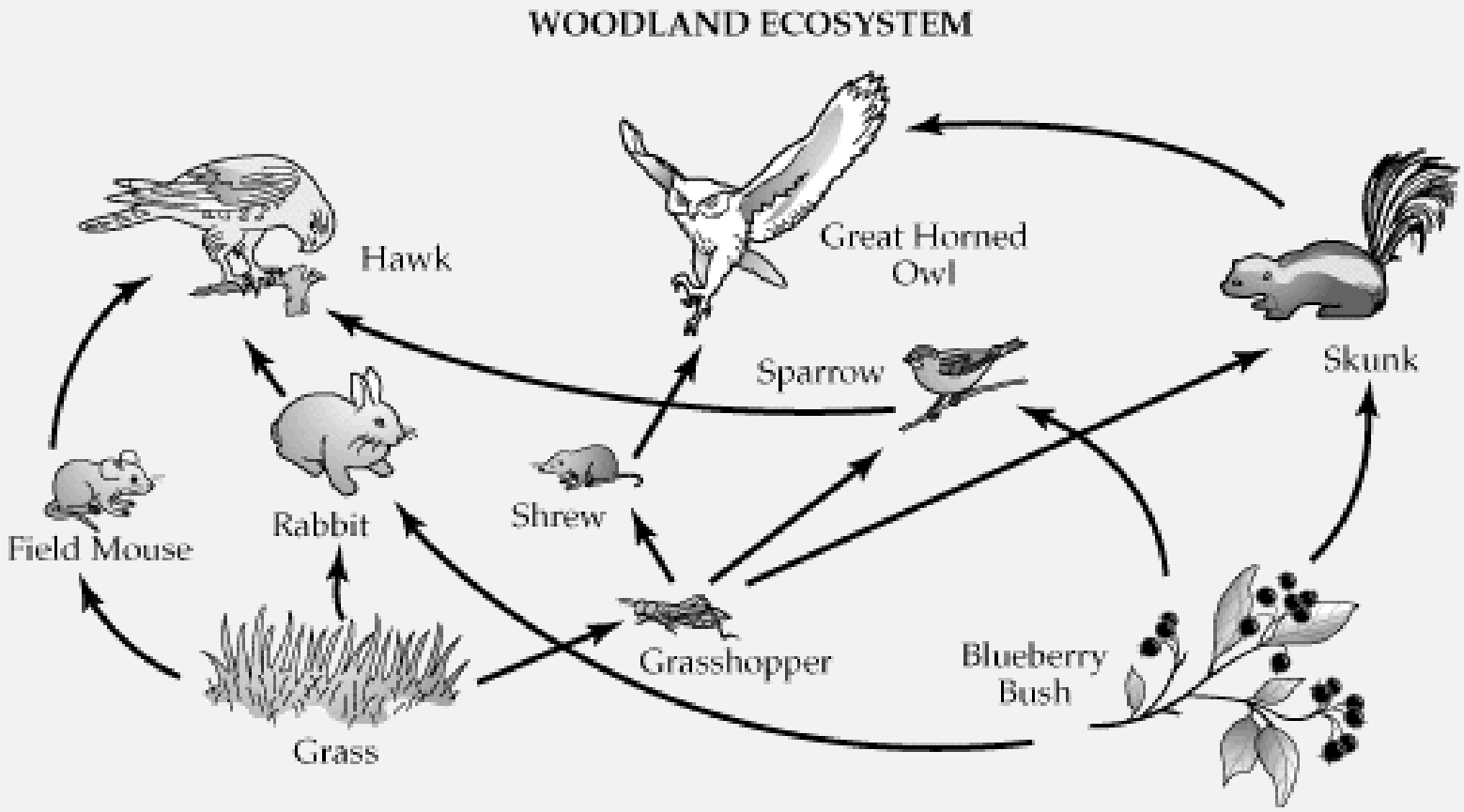
Design for Delight




DEEP CUSTOMER
EMPATHY

DEEP CUSTOMER EMPATHY

Identify all the customers

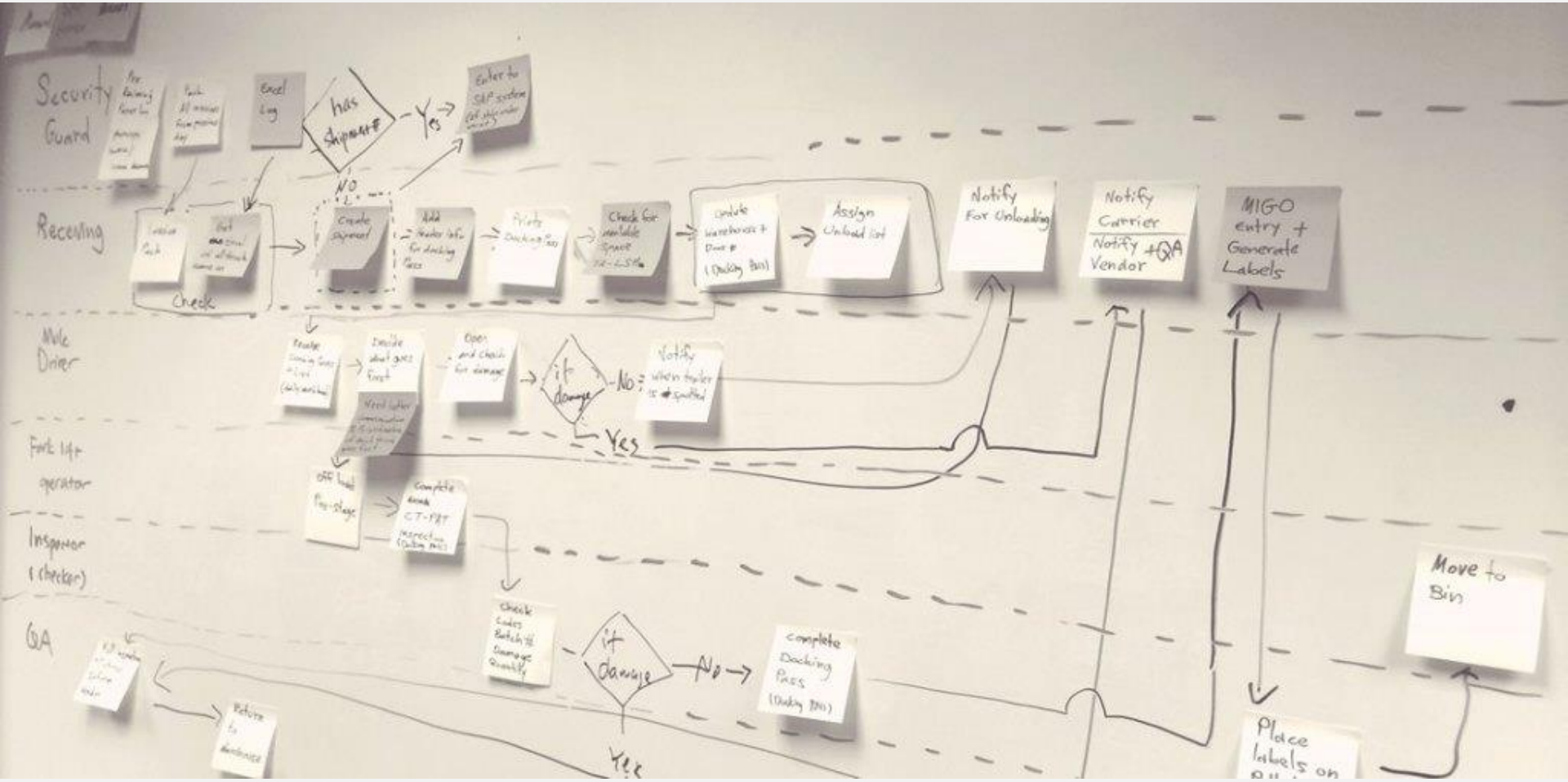


DEEP CUSTOMER EMPATHY

Interview and observe

DEEP CUSTOMER EMPATHY

Map the relevant business processes, workflows, and constraints

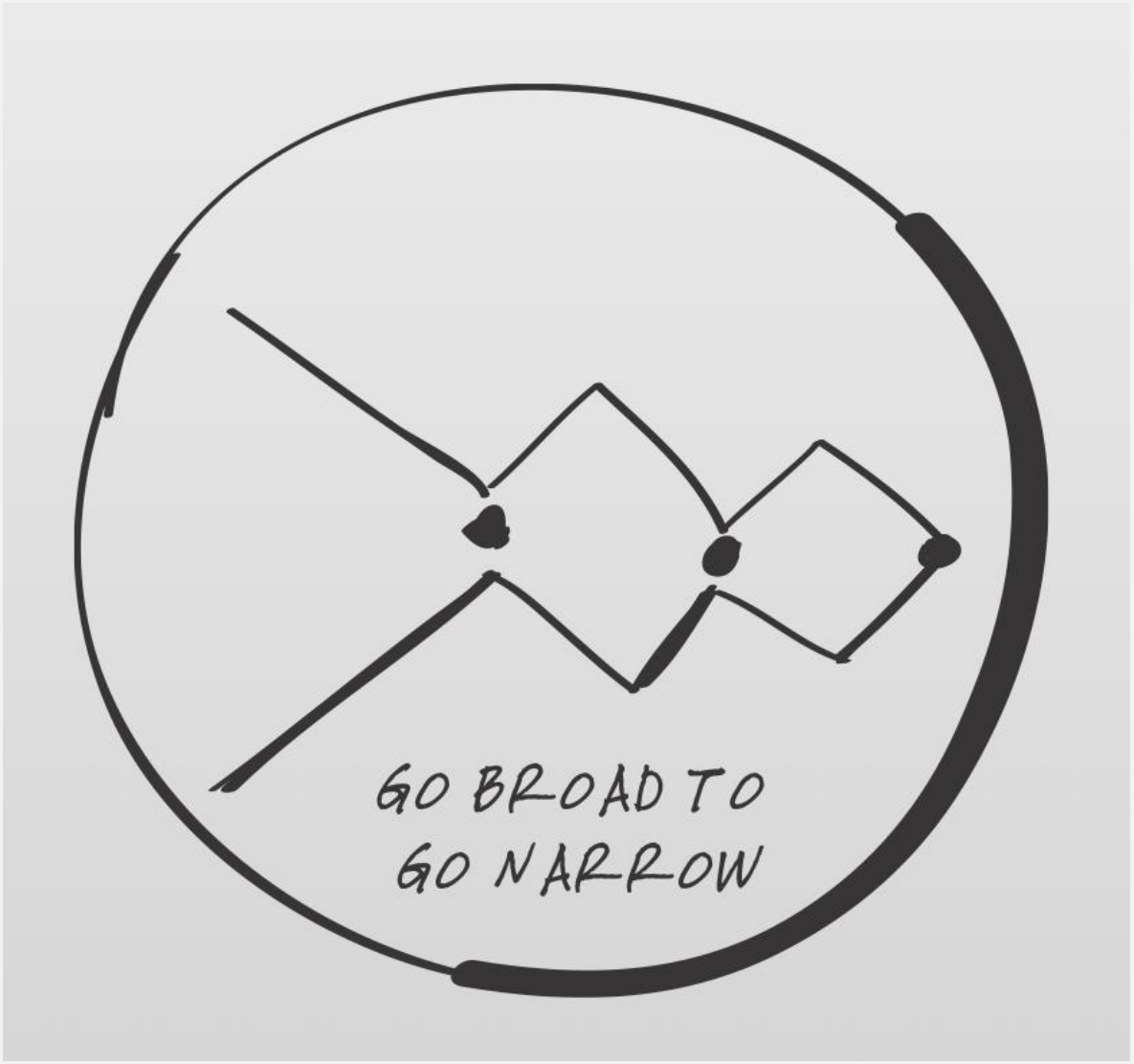


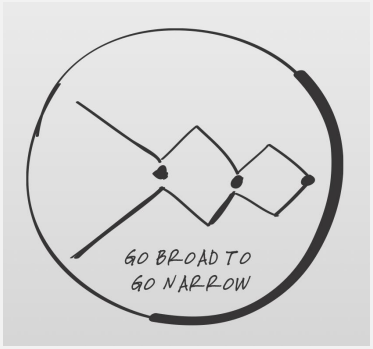
Play back what you learned to test your understanding

Synthesize into a problem statement, design criteria, and success metrics

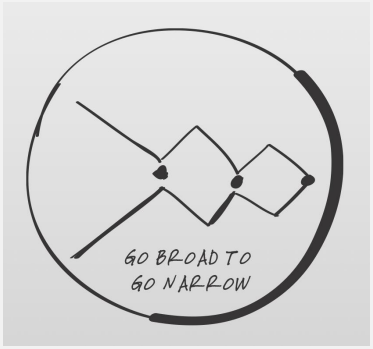
Problem Statement

- I am _____.
  "Who" with 3 characteristics
- I am trying to _____,
  Outcome/Job
  but _____
  Problem/Barrier
  because _____,
  Root Cause
  which makes me feel _____.
  Emotion

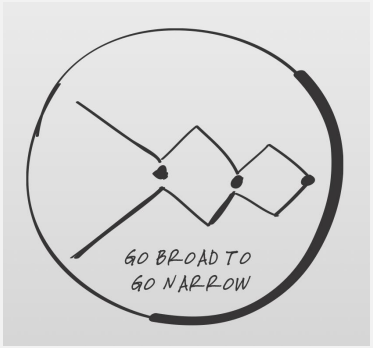

GO BROAD TO
GO NARROW



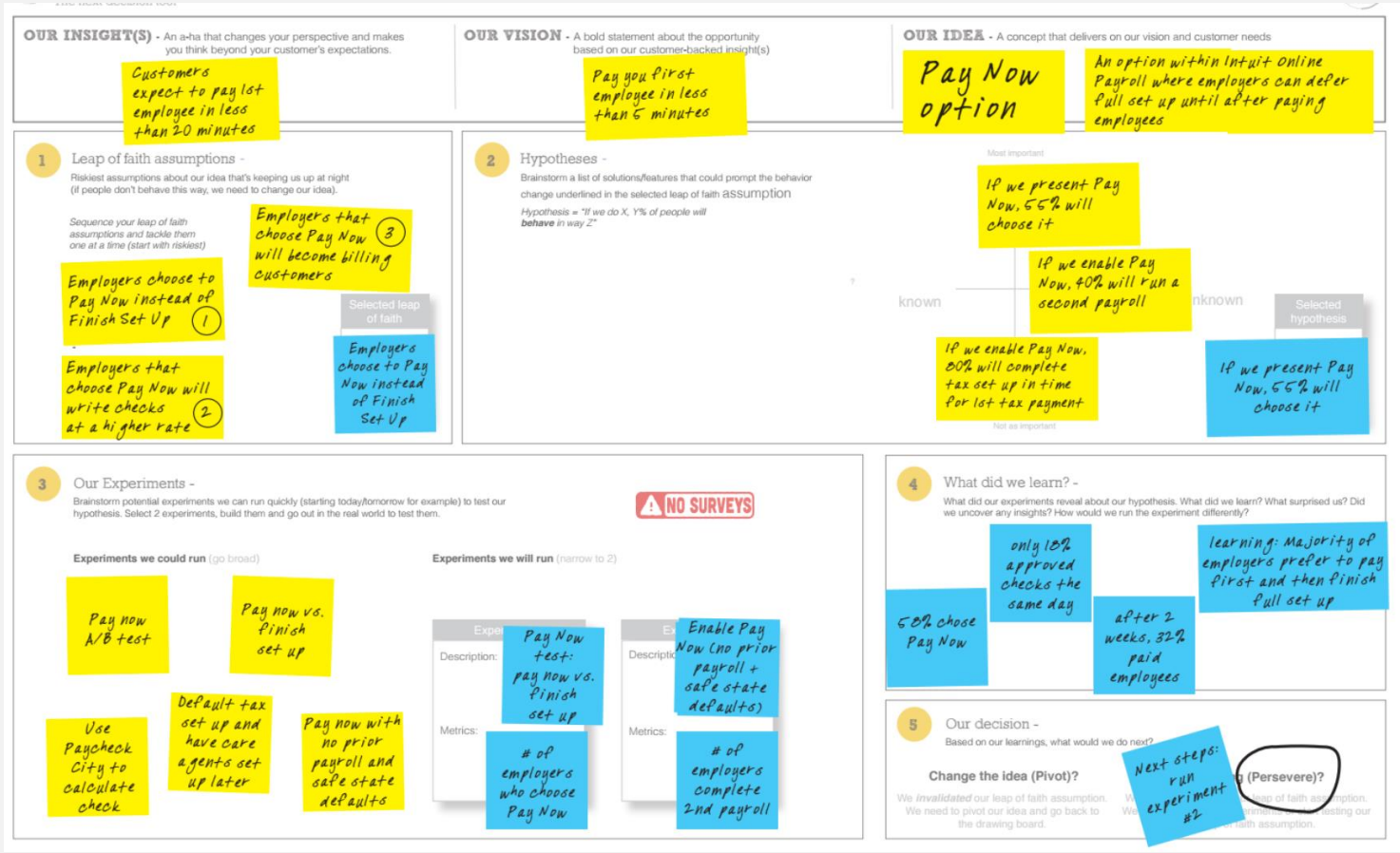
The Data Scientist as convener



The Data Scientist as facilitator



Outputs are solution hypotheses and experimentation plans




RAPID EXPERIMENTS
WITH CUSTOMERS

RAPID EXPERIMENTS WITH CUSTOMERS

Start with paper prototypes

RAPID EXPERIMENTS WITH CUSTOMERS

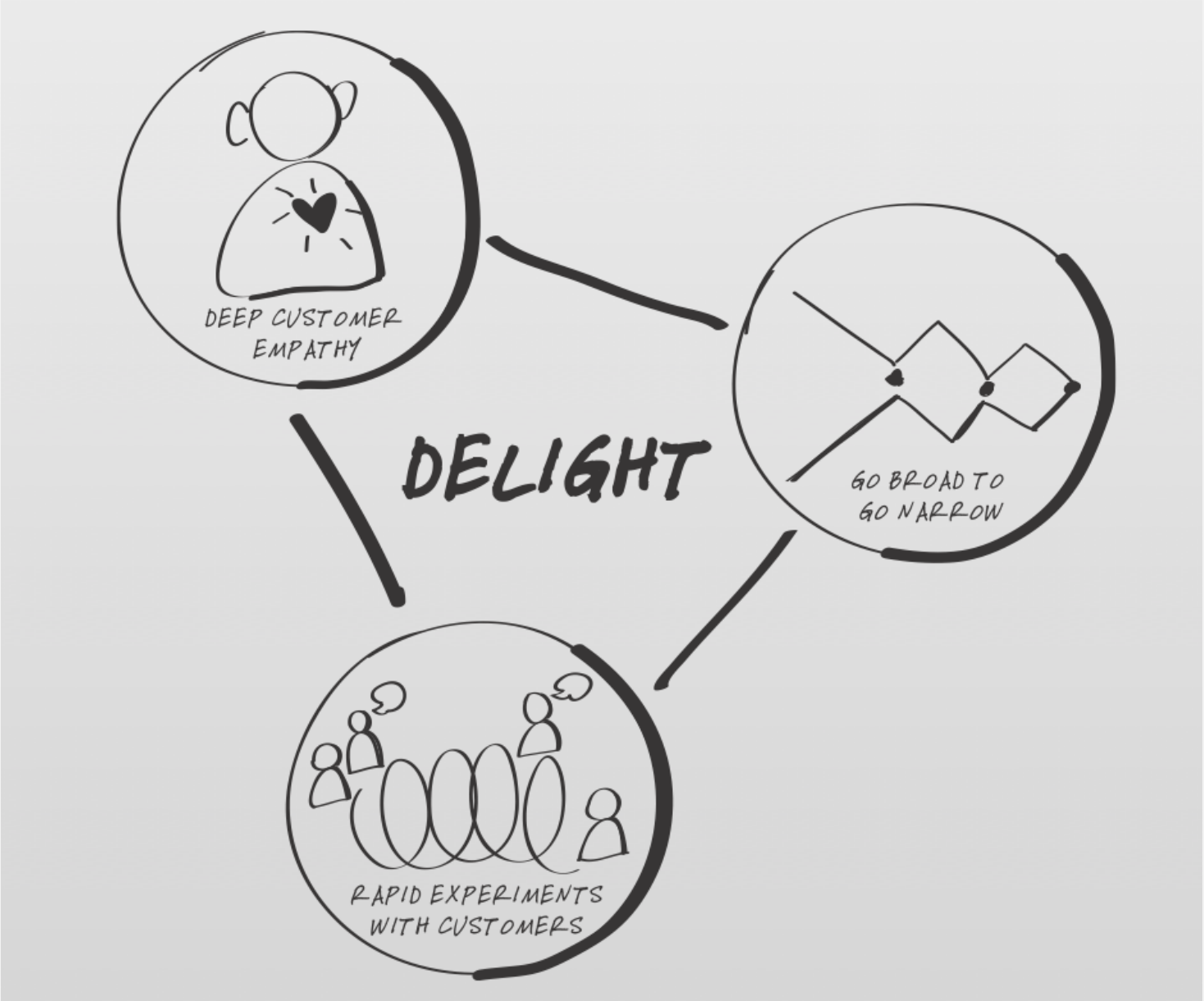
Then iterate

1

2

3

Design for Delight



Take time for all things: great haste makes great waste.

(Benjamin Franklin)