Early Career Personal Example
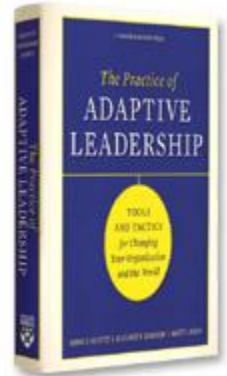

What did I do wrong?

Adaptive vs. Technical Challenges
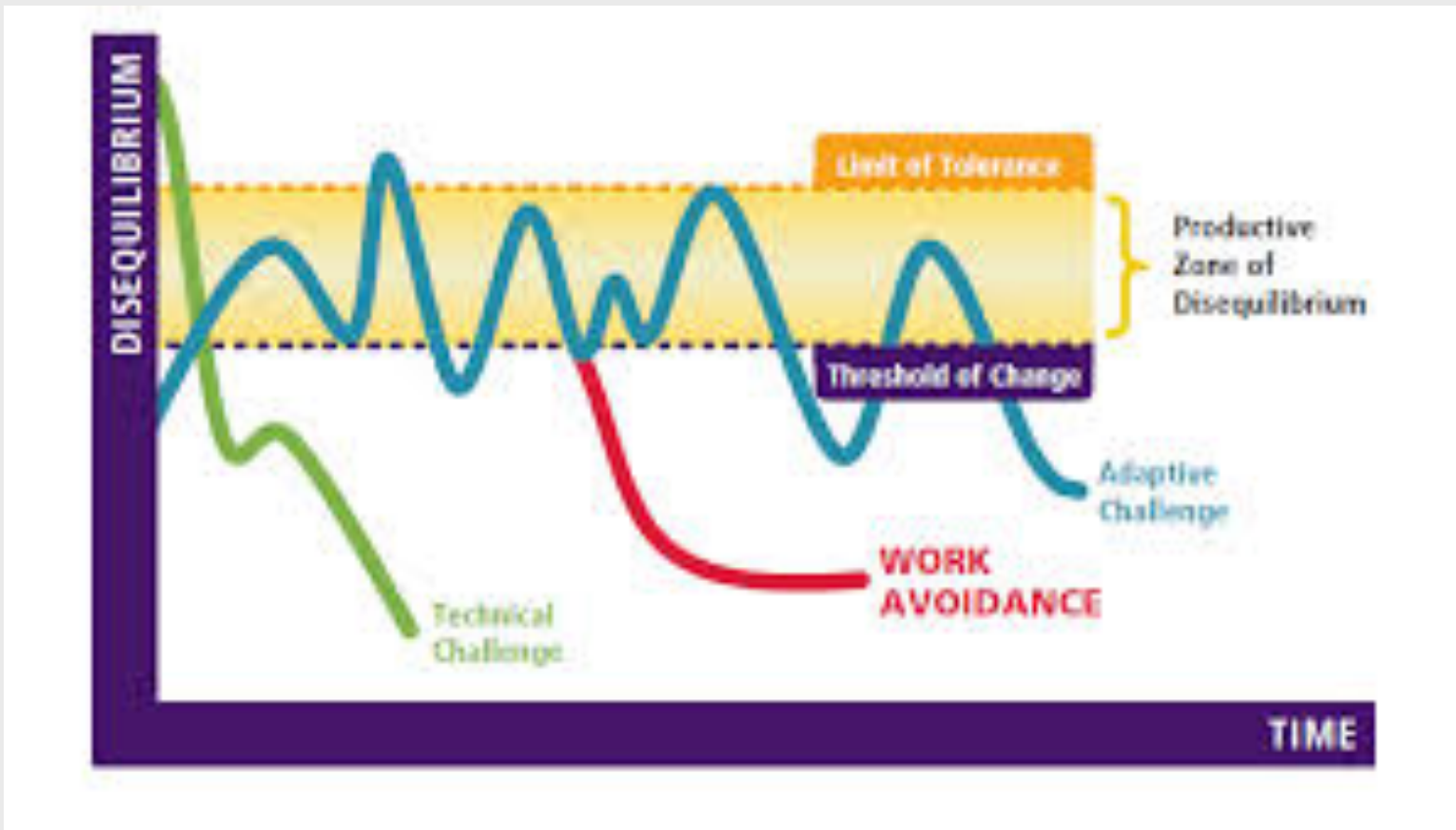*Adaptive Leadership,* Heifetz and Linsky

Technical

Adaptive

STANFORD SOCIAL INNOVATION REVIEW PRESENTS

DATA ON PURPOSE

TELLING GREAT STORIES WITH DATA

Stanford SOCIAL INNOVATION Review

Must Stay in Productive Zone of Disequilibrium

Data Analytics Can Be Highly Disruptive to an Organization

Stakeholder interests

- Who benefits from status quo?
- Whose job or role is at stake?
- "WIIFM" – What's in it for me?
- What is "FUD" – Fear, Uncertainty, Doubt

Roles in system

- Role you play wearing "Data" mantle

My initial career example: What did I do wrong?

Where Did Resistance Come From?
Data = culture change

Anecdote Trumps Data

Why the Cognitive Dissonance?
Daniel Kahneman, Thinking Fast and Slow
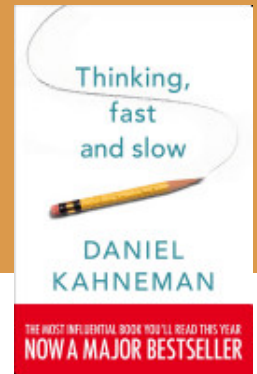
The Evolution-Designed Brain
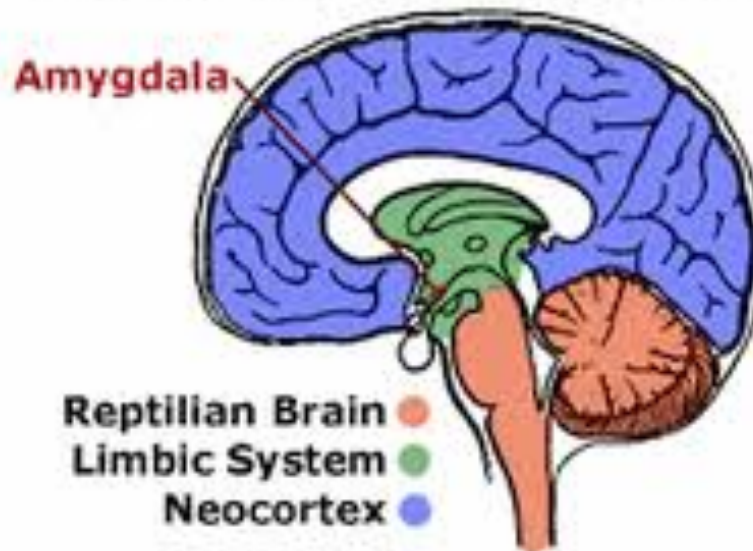
Emotion

(primitive, fast thinking)

Data

(recent, slow thinking)

Amygdala

Reptilian Brain
Limbic System
Neocortex

Data Is Unsatisfying When Does Not Support Anecdotes

Private Schools' Change in Tuition vs. Change in Enrollment in subsequent year
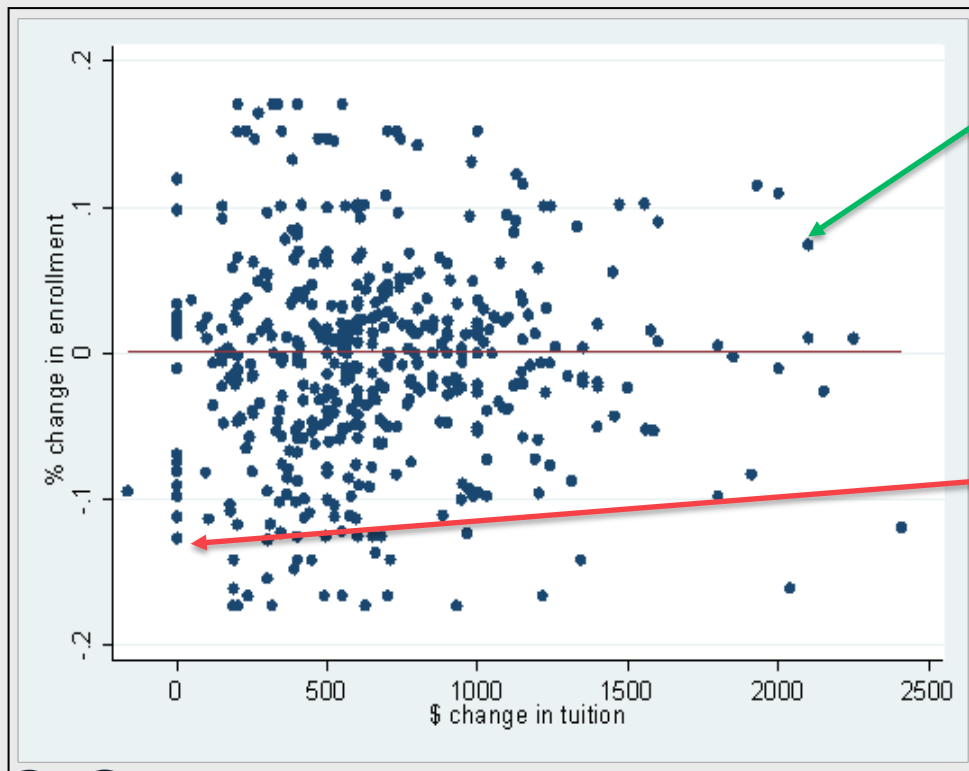
This school raised tuition 10% and enrollment grew due to high perceived value

This school kept tuition flat and enrollment fell anyway because poor perceived value

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Stanford SOCIAL INNOVATION Review

How Might You Alternatively Display a Regression To Tell a Story?

Predicted Staff Compensation

Regression Analysis

	Actual Total Compensation	Predicted Total Compensation	Total Compensation $ Difference	Total Compensation % Difference
Guest	$110,000	$97,486	$12,514	12.8%
Simmonds	$56,240	$75,190	$-18,950	-25.2%
Stewart	$34,424	$70,004	$-35,580	-50.8%
Taylor	$35,000	$40,524	$-5,524	-13.6%
Terry	$50,620	$43,456	$7,164	16.5%
Todd	$30,000	$34,341	$-4,341	-12.6%
Vickery	$30,970	$38,713	$-7,743	-20.0%
Walton	$58,495	$55,194	$3,301	6.0%
Wellborn	$30,640	$42,917	$-12,277	-28.6%
Whitley	$27,500	$31,595	$-4,095	-13.0%
Williamson	$33,000	$31,897	$1,103	3.5%
Yates	$45,835	$39,168	$6,667	17.0%
Kane	$46,575	$52,319	$-5,744	-11.0%

Net Promoter Score: Rising Tide Lifts All Boats

| National Average | 56% | 32% | 8% | 3% | |

Legend
- ■ Strongly Disagree
- ■ Disagree
- ■ Neither Agree nor Disagree
- ■ Agree
- ■ Strongly Agree

Survey Item:

"I would recommend my parish to a friend"

Good Movies All Use This Idea

1. Academic: Statistical Models, Bill James

2. Innovation Oakland A's, Billy Beane

3. Mainstream: every baseball team uses statistics for player drafting, development, contracts

Moneyball Scene: Note the Anecdotal Stories to Drive Home the Data!

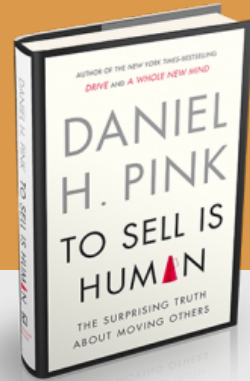# Moneyball Scene: Note the Anecdotal Stories to Drive Home the Data!

Pixar Films Classic Story Arc
Dan Pink, To Sell is Human

<State the problem>
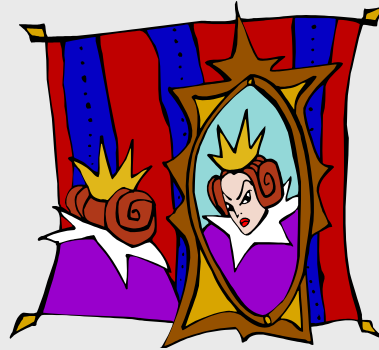
Every day, <insert bad thing – anecdote that is not supported by data>

One day, <insert good thing – a hypothesis you tested>

Because of that, <result>

Because of that, <another good result>

Until finally, <happy ending>

Once Upon a Time

The Oakland A's had no money to spend and lost to teams with bigger payrolls and better players

Every day, their scouts tried but failed to sign the best players by conventional statistics due to lack of funds

One day, the general manager decided to employ a radical tactic: statistics to identify undervalued players

Because of that, they signed players that other teams did not want but the data showed would result in wins

Because of that, the team started to win and gain confidence

Until finally, they won their division for many years in a row despite the smallest payroll
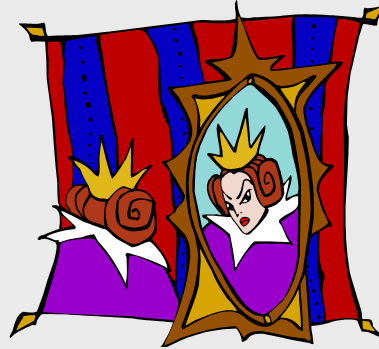
Hypothesis Testing:
What drives jumps in donor giving?

Pipeline challenges

- 10,000 mid-level donors ($1-10k) in database in 2000
- 65 of them made the jump to major gift levels ($25k+) by 2010

Time allocation

- Limited number of major donor cultivators, with busy portfolios
- Which of 10,000 donors to focus on to make the jump?

Methodology

- Stage 1: Surveyed 8,000 donors across 35 affiliates
- Stage 2: Propensity match (compare 2 groups):
  - 65 Donors who made the jump
  - 300 Similar net worth donors who did not make the jump

Activities Potentially Associated with Giving Increases

Factor	Correlation: +, --, or none	Anecdotal Justification
Seat on the board or committee		
Frequency of event attendance		
Program volunteer		
Planned or endowment gift		
Solicitation by volunteer vs. professional		
Frequency of cultivation meetings		
Spousal involvement in your org		

Let's Test Your Intuition….

Area	Correlation: +, --, or none	Additional Data on Major Donors
Seat on the board or committee		
Frequency of event attendance		
Program volunteer		
Planned or endowment gift		
Solicitation by volunteer vs. professional		
Frequency of cultivation meetings		
Spousal involvement in your org		

How Many Did You Get Right?

80% of Client Anecdotes (across 1200 clients) are Not Supported by the Data...

... So diffuse the power of anecdotes by turning them into hypotheses you can test

Did Your Mind Seize on New Anecdotes to Fit the Data Findings?

... Discussing the 80% of hypotheses that were not substantiated can be more impactful than showing the 20% that were
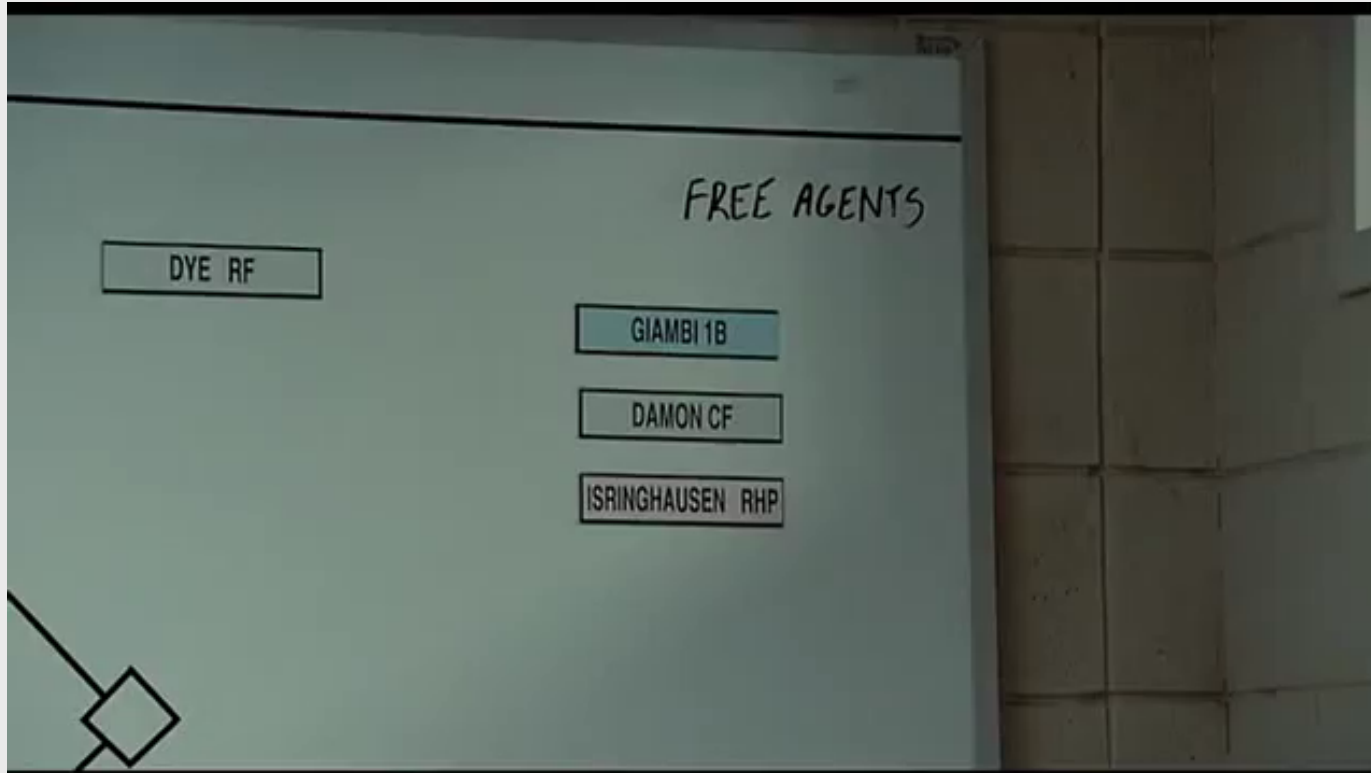
Moneyball, Anecdotes, and Hypotheses
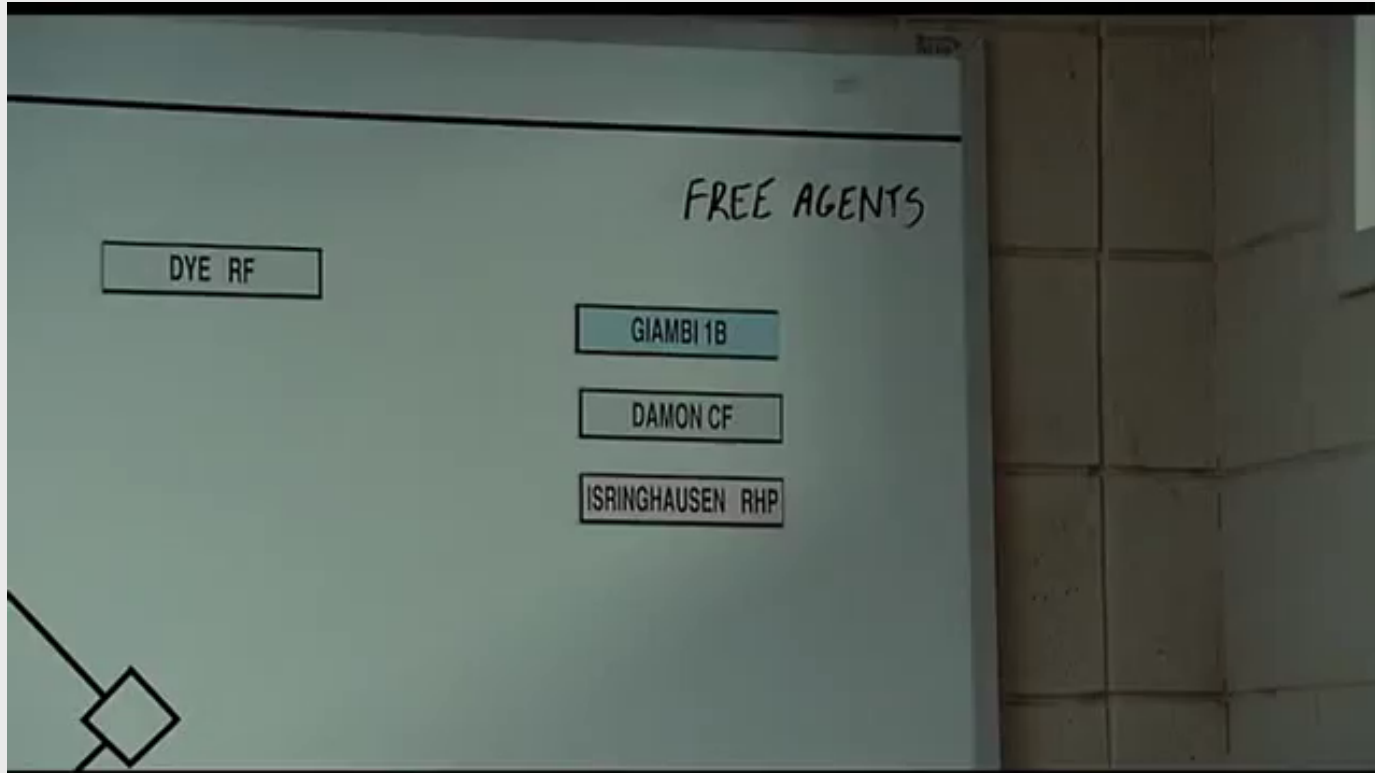
Moneyball, Anecdotes, and Hypotheses

Living Too Much in the Data

"I think you should be more explicit here in step two."

7 Stages of Data-Driven Decision Making: Where Nonprofits Fall Short
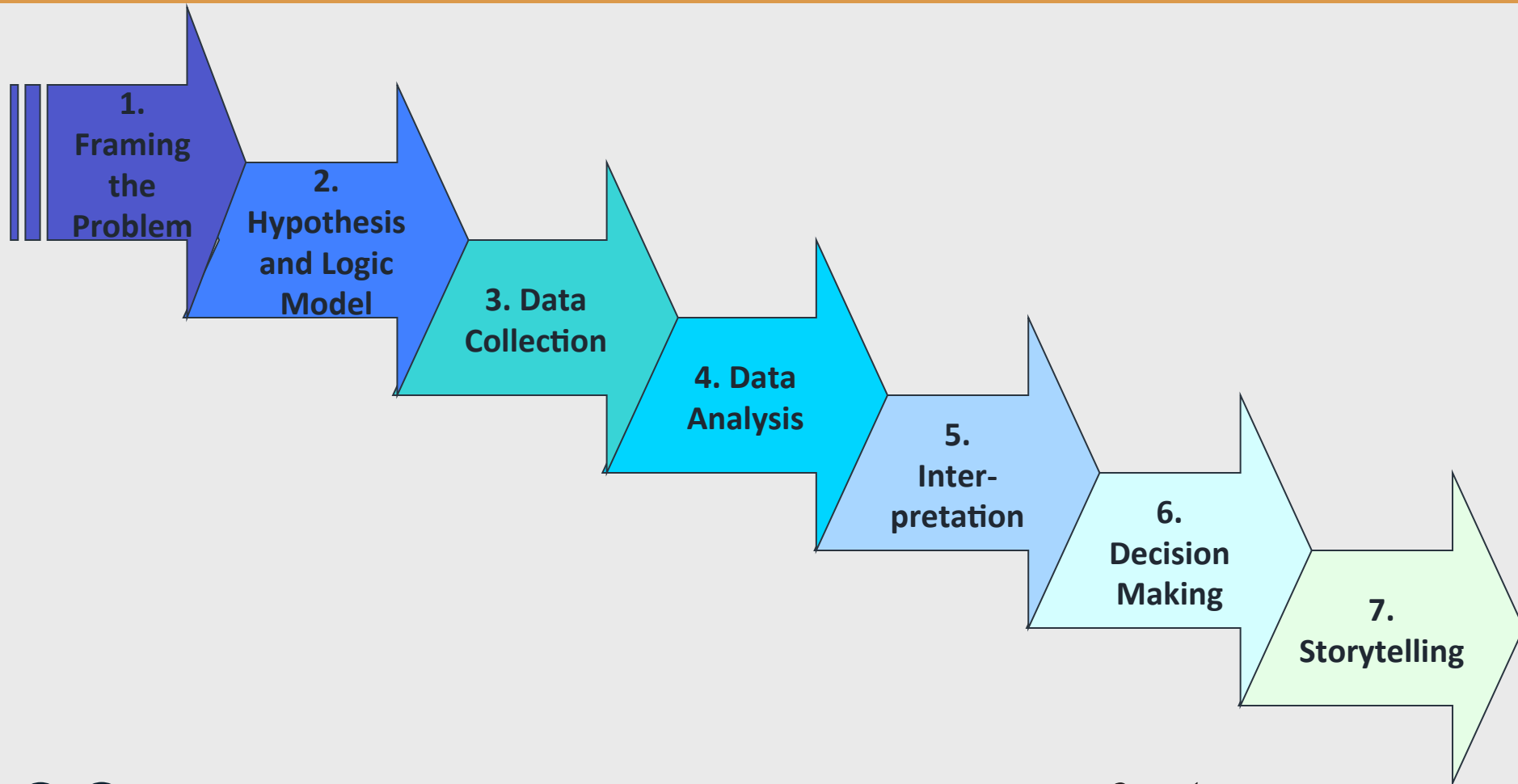
1. Framing the Problem
2. Hypothesis and Logic Model
3. Data Collection
4. Data Analysis
5. Interpretation
6. Decision Making
7. Storytelling
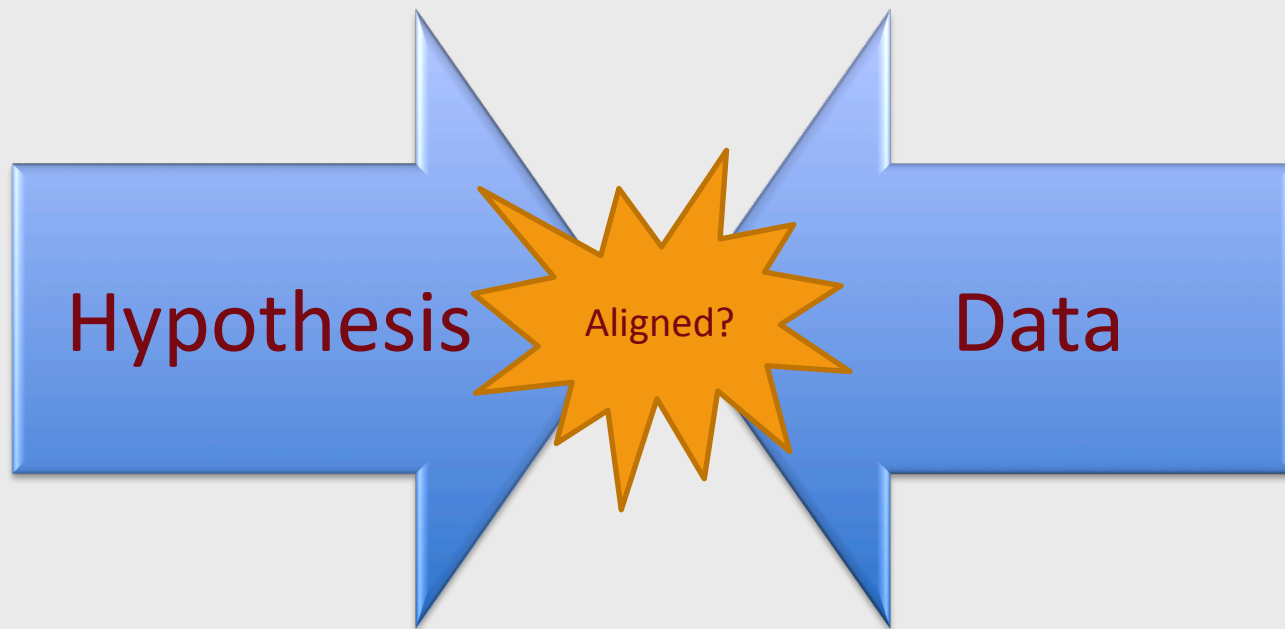
Our Experience at Measuring Success Suggests

1. Hypotheses to Test?
2. Set up Data Systems
3. Analytics and Visualization
4. Culture Change Coaching
   & Data Storytelling

Principles

A. Who is the client, what are stakes?

B. Adaptive change: how maintain disequilibrium?

C. Since anecdote rules data, how do you frame data findings with anecdote?

D. Use classic storytelling arcs

E. Hypothesis testing up front takes power out of anecdotes

F. Don't shortchange steps in data-driven decision making