



# Transformations: Some Lessons

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# About me: Education

- ▶ Education:
  - ▶ UC Berkeley
  - ▶ Economics Masters: UC Davis
  - ▶ Management PhD: UCLA



# Work Experience

- ▶ Bates White
  - ▶ Consulting
- ▶ TinyCo (A16Z backed startup)
  - ▶ Director of Analytics & User Acquisition
- ▶ Sega
  - ▶ Director of Analytics
- ▶ Currently:
  - ▶ Professor of Data Science
  - ▶ Director of Partnerships, The Data Institute



# Interns/Partnerships



UBER



# See a *Generational* Gap in Companies

- ▶ Post-data companies:
  - ▶ “Data driven” or “data-informed” comes naturally.
  - ▶ New data sources quickly assimilated and used.
  - ▶ Easy and Rapid investment in data technologies and solutions.
- ▶ Pre-data companies:
  - ▶ *New Data* viewed with suspicion.
  - ▶ Data used as a weapon.
  - ▶ Difficult and *targeted* investment in data technologies.
- ▶ Can be a local condition – but tends to be global.

# AI?

- ▶ It's really difficult to build even more advanced products and services if this baseline, data driven, functionality isn't met.
- ▶ For example:
  - ▶ Pre-data companies, even when they have data, tend to have poor data hygiene or even access to data.
  - ▶ Pre-data companies have a hard time understanding advanced data errors (and being comfortable with them).
- ▶ If you want to jump on the AI hype train successfully, you need to have a successful data foundation.

# Sadly...

- ▶ Many companies want to move from one generation to the other.
- ▶ We will cover a few strategies that companies undertake that I've seen fail (and why that failure happened).
- ▶ Finally talk about the one system that works.
- ▶ Disclaimer:
  1. All thoughts my own.
  2. Still thinking through this.

# Strategies

1. The Incubator
2. The Special Projects Team
3. The IT-special
4. The Cultural Acquisition
5. The “Core Competency”



# I. The Incubator

- ▶ Basic idea: Let's put together a new group of people who will work as data consultants within our company!
- ▶ We will hire some MBA's, Data Analysts, Scientists and Engineers and they can push teams forward!
- ▶ Example:
  - ▶ Multi-national company with databases and teams regionally focused and Managed (e.g. North America Team, ASEAN Team, etc.).
  - ▶ Logistics / Supply operations also segmented.
  - ▶ CEO creates a team to "pull our logistics operations into the 21<sup>st</sup> Century"
  - ▶ Wants to start by "Synchronizing and Standardizing Reporting"

# Why this doesn't work

- ▶ History
  - ▶ Do regional managers believe that they are going to outlive this effort?
  - ▶ Most CEO driven initiatives last 2-3 years.
- ▶ Ill-defined goal
- ▶ Entrenchment sources not removed
  - ▶ At the IC level within the company, what is forcing a behavior change?

## 2. The Special Projects Team

- ▶ Basic idea: Let's put together a team to do a special data-focused project.
- ▶ Let everyone do what they are currently doing, but the special projects team will do data-focused versions of the same task.
- ▶ Example:
  - ▶ Large CPG which traditionally spends a lot on marketing (via an Agency) has decided to put a SWAT team together to bring their performance marketing operations in house.
  - ▶ Goal is to work outside, in parallel to the marketing team.

# Why this doesn't work

- ▶ Organizational resentment
  - ▶ Two-silos = One is team A and One is team B
- ▶ Trust
  - ▶ Why should the old marketing team trust the new marketing team?

# 3. The IT-special

- ▶ Basic idea: Let's have IT lead, they know computers!
- ▶ The IT team will build a plan to move our company forward by using their computer sense and IT knowledge.
- ▶ Example:
  - ▶ Traditional services company which relies significantly upon (long-term) government contracts has decided to modernize their aging (MAINFRAMES!!!) infrastructure.
  - ▶ Initial budget given to IT to explore modernization.

# Why this doesn't work

- ▶ Incentives and Expertise
  - ▶ IT group is a *Cost* center.
  - ▶ Data infrastructure an obvious cost, but also benefits.
  - ▶ How to define SLA?
    - ▶ What expertise does IT have in this area?

# 4. The cultural acquisition

- ▶ Basic idea: There is a company in our industry that has the DNA we want, so lets buy them, we have money!
- ▶ We will purchase a company that is successfully doing what we want to do (or where we want to go), but not at our scale.
- ▶ Examples abound!

# Why this doesn't work

- ▶ Why would this work?
- ▶ What mechanism is going to pull information up?



# 5. The “Core Competency”

- ▶ Basic idea: Outsource everything since this isn't our "Core Competency"
- ▶ Data is important – but our strength / differentiator is in our Marketing (or logistics or manufacturing or brand name or whatever), so lets outsource our data knowledge.
- ▶ We'll be able to leverage our expertise and data will just *multiply* our Core!
- ▶ Example:
  - ▶ Company hires a firm to build all of their data infrastructure.

# Why this doesn't work

- ▶ Lack of flexibility:
  - ▶ Change is no longer a natural process, but not a new contract.
- ▶ Lock-in:
  - ▶ Outsources naturally Silo (hard to write an RFP with links)
- ▶ Differential Incentives:
  - ▶ Company: Growth / Experimentation / etc.
  - ▶ Outsource: Revenue & Continuing the contract.
    - ▶ “New Technology” incentive

# So... is this hopeless?

- ▶ NO. There is one model that works!
- ▶ Bottom-up support + Top-down pressure + Time

# Bottom up support

- ▶ Remove obstacles to using new technology:
  - ▶ Training, training, training: OVER train
  - ▶ Build in buffer around failure (when numbers don't match or reports are late)
- ▶ Increase obstacles for using old technology:
  - ▶ How do you de-incentive old processes?
- ▶ Increase literacy and use positive examples to culturally incentivize.
- ▶ More training / conferences
  - ▶ Need to undo both organization and personal momentum for tasks.
  - ▶ Exposure is an under-utilized weapon when trying to change.

# Top down pressure

- ▶ What specific goals are being put in place? Are they concrete?
  - ▶ By next July all ROI calculations have to be presented from our new in-house reporting system.
  - ▶ Hiring: All new job postings + hiring processes include a significant data component.

# Finally: Time

- ▶ Don't expect organizational / personal change to be quick.
- ▶ It takes a lot of time.
- ▶ Years.

# Thanks!

- ▶ Questions!?!?
- ▶ Feel free to also reach out: [ncross@usfca.edu](mailto:ncross@usfca.edu)