Finishing Before I Start

- I am a data security optimist: I believe that we can adapt to effective regulations with minimal business impact if we are smart.

- Don’t forget the role of the user in the process of developing rules, oversight, and processes around data security.
  - This applies to all of us: Regulatory Agencies, Oversight, and Business (often, mostly business).

- Don’t underestimate the complexity of what we are discussing.
  - Something that takes a book to write down, even a small one, is complex.

- Technical solutions are much better than policy, but are much harder than you think to implement.

- Treat analytics as a part of a business process, not a business process itself.
OUR CLIENTS RELY ON US TO SAFEGUARD THEIR CONFIDENTIAL DATA - IT’S A RESPONSIBILITY SHARED BY EVERY TEAMMATE IN EVERY ROLE.
Background

A few key issues

Policy

Unintentional

MVA

(Minimum Viable Access)

Tech Controls

Intentional
Types of Data Privacy Risks: Intentional

Internal Fraud: Prevention and detection of intentional sale/use looks a lot like external fraud

Prevention uses similar tools: monitoring, rules/models

Things we worry about: False positive rates, privacy concerns, creepiness

Physical controls also effective
- Phones
- Printers
- Thumb drives
Types of Data Privacy Risks: Unintentional

How is data used? This can be roughly divided between production work (reporting, dashboards, the running of models) and non-production (analytics).

**PRODUCTION DATA WORK: EASY (RELATIVELY)**
- Process should be untouched by human hands
- Should be recorded
- Risk at end usage (access control)

**NON PRODUCTION: HARD**
- Data needs are unclear
- Very touched by human hands (in prod)
- Not recorded
- Complex results
- *MUST BE IMPLEMENTED!*
Unintentional Fraud Prevention

Reminder: Data privacy is complicated!
- California Data Privacy Act
- GDPR
- What Next?

Change your organizational structure: Centralize data (at least a little)
- Fewer points of contact between sensitive data and users

Change your data: Smart data (masking, binning, etc)
- Not as easy as it looks!

Change your business process around analytics: Have a clear handoff from non-production to production data
- Implementation controls are a strong risk mitigant
CLOSING THOUGHTS

• Technical controls are the best answer, but they are both complicated and linked to data strategy, all of which is linked to usage. This is hard.

• Treat analytics as a business process, control where data is sourced from, who touches it and how results are implemented

• Don’t underestimate complexity
  • Everyone can’t be an expert
  • Don’t create a process that requires people to be know more then they will
  • Org structure can help here