Laying Tracks to Enterprise Grade Observability:

Technology Evolution Amidst Technology Evolution @ Target

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Fun facts about us...
To help all families discover the joy of everyday life
Easy peasy, right?
Well...
Monoliths
Batch processes
The mainframe!
Vendor packages
Point to point integrations
Isolated ops data
Waterfall methodology
Contractor engineers

Not too long ago…
Then everything changed
Let’s pivot everything!

- Distributed microservices
- Event driven
- Custom built solutions
- Open source
- Platform services for retail
- Consolidated ops data
- Agile/product model
- Team Member engineers
And it worked!
America’s easiest place to shop

Order Pickup

Drive Up

Same-day Delivery
shopped by Shipt

Delivery From Store

Restock

Free 2-day shipping

same day
next day & 2 day
2-day shipping
But, it wasn’t without some challenges...
What could go wrong?

Wait…

What IS going wrong?
SUCCESS =
Know we are at risk +
Associate that risk to impact +
Narrow the scope of the problem or opportunity quickly

What we will need:

- Tools & Services (UX, Chaos/Resiliency, A/B Testing, ML/AI, etc.)
- Inventories & Taxonomies
- Operational Events
- Metrics
- Tracing
- Changes
- Operational Relationships
- Logs

Measurement
Let’s talk Measurement
The road must start somewhere
Look out and up
The END?
What do we do with all this data!
What’s next?
Overall, we’re somewhere around here…

Development and Introduction

Learning and Iteration

Culture and Adoption

Automation and Scale

1 2 3 4
Easy wins to drive culture and adoption?
“IT deserves the same architectural care and attention as our retail business.”

Joel Crabb, VP of Architecture @ Target
The Road Ahead:

Platform services for retail ALL!

Ops standards to set clear expectations

Expand UX & tools to make it easy to do the right thing

Observability as a mindset

Tracing and Event offerings

ML/AI

Scale it!
Thank You!

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