

The Data Product Paradigm

and the Modern Data Stack



Bill Dague

VP Product Management at Nasdaq

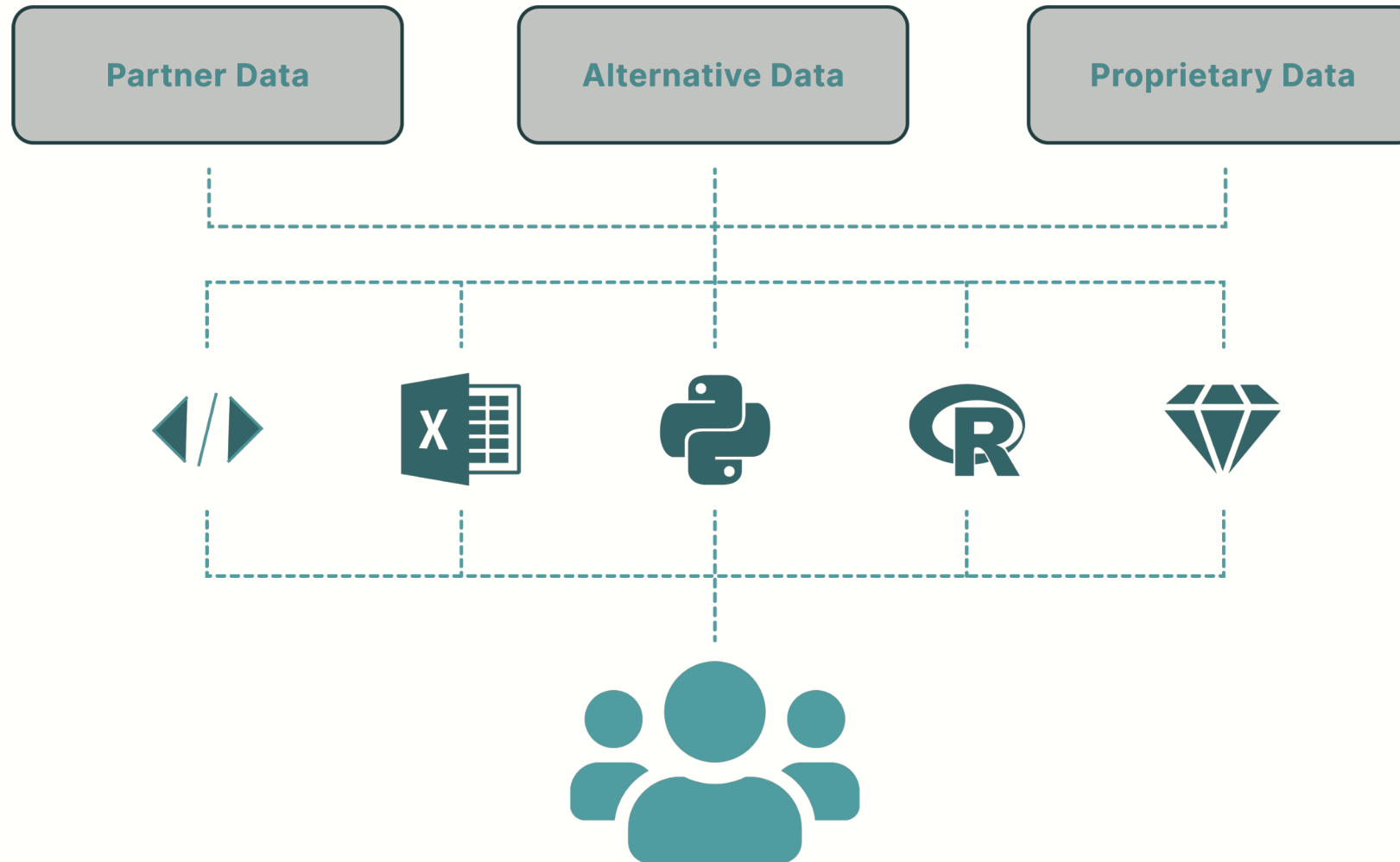
ORGANIZED BY  databricks



Lenny Rosenfeld

VP Software Engineering at Nasdaq

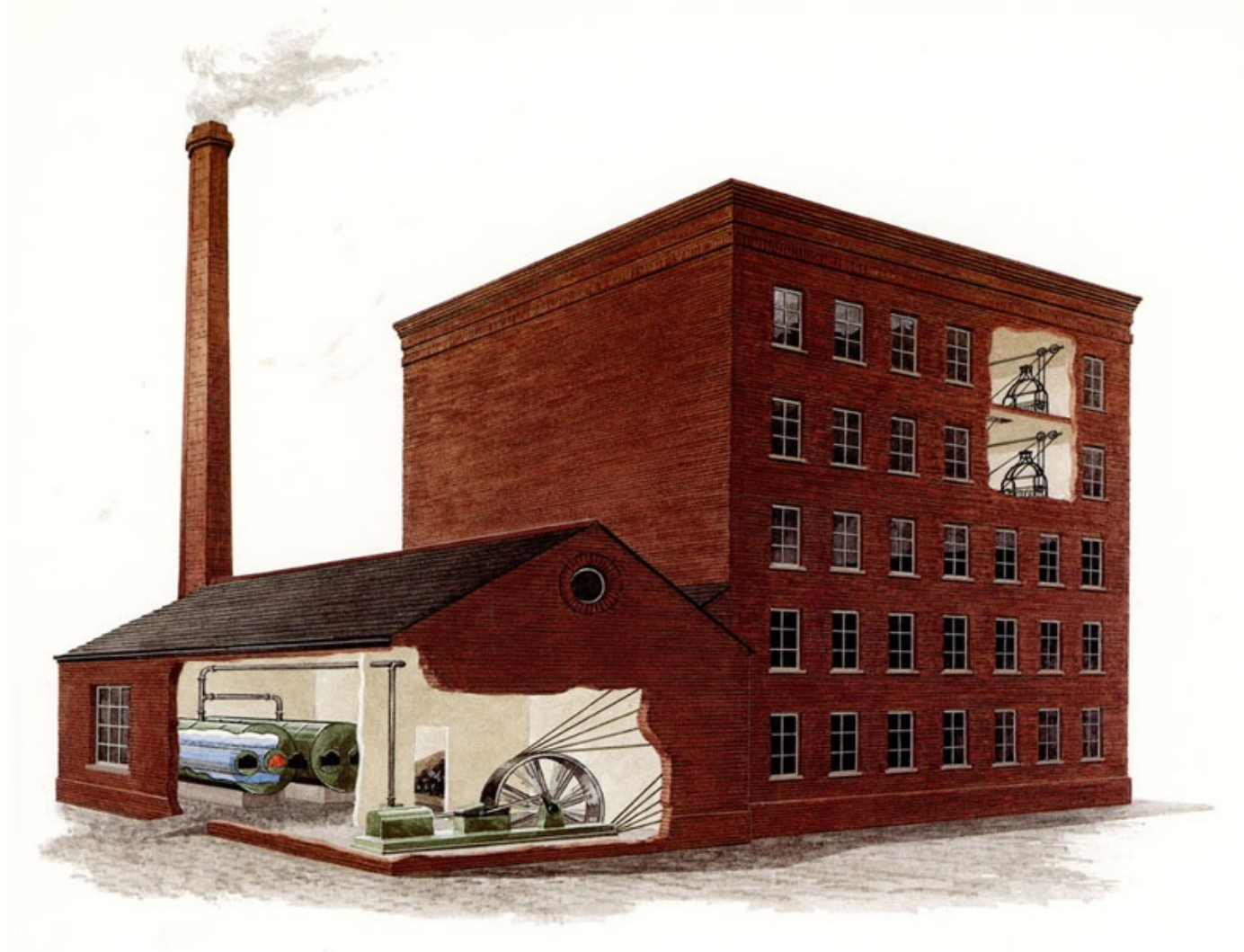
Data Link (data.nasdaq.com)



THE MISSION

Help clients answer
questions with data.

Productivity Paradox



It's only partly the technology

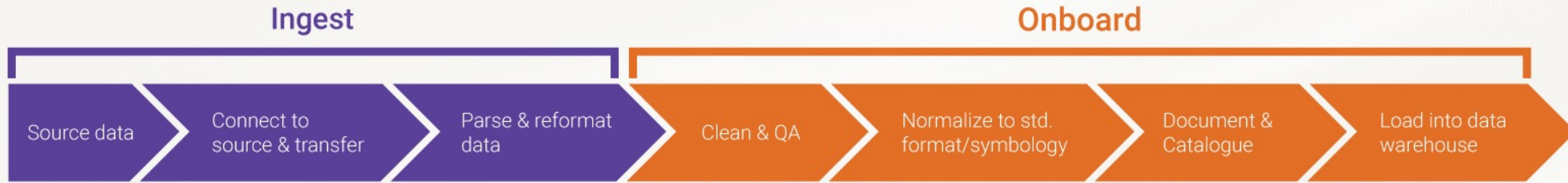


Mosaïque d'Ulysse et les sirènes by Habib M'henni. Public domain via [Wikimedia Commons](https://commons.wikimedia.org/wiki/File:Mosaïque_d'Ulysse_et_les_sirènes.jpg).

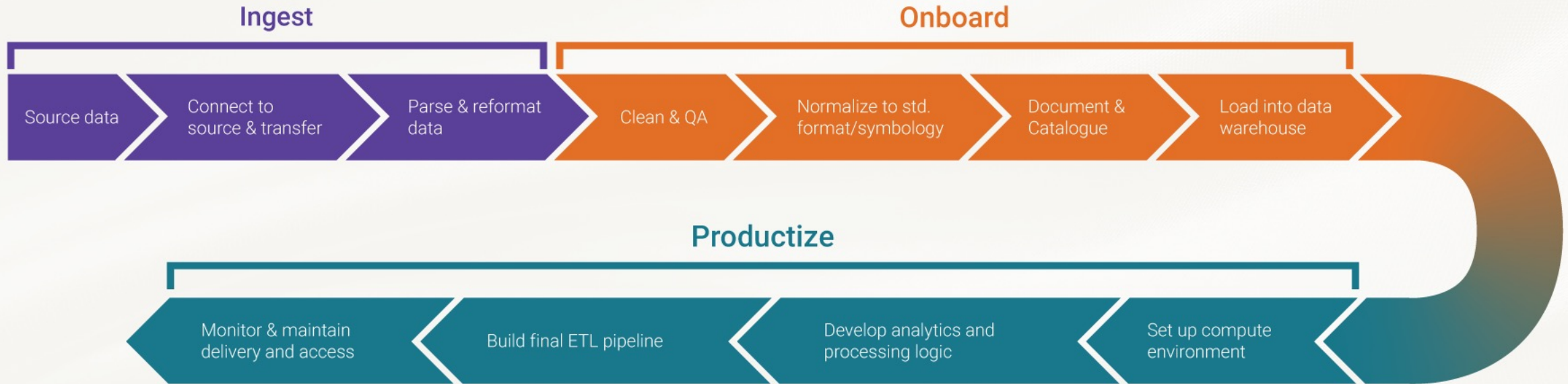
The Data Deployment Odyssey



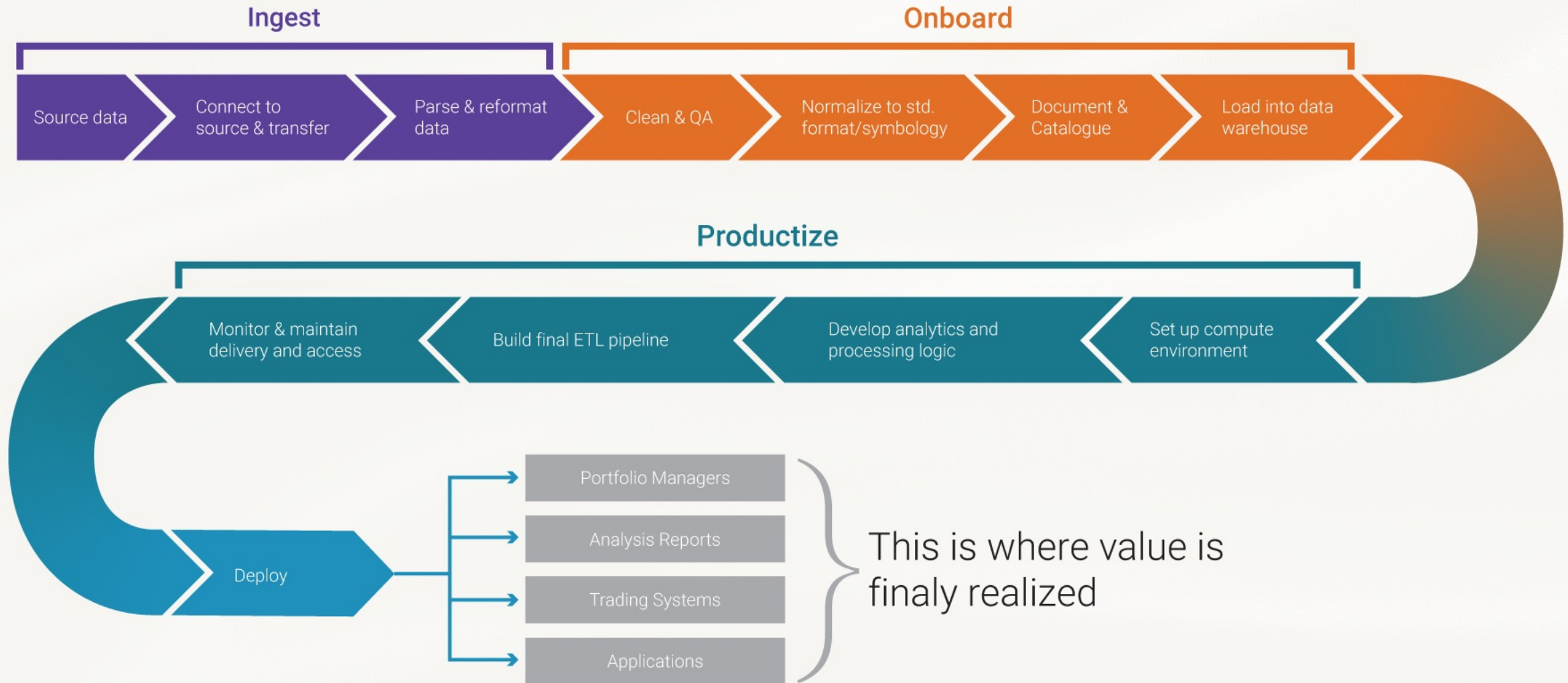
The Data Deployment Odyssey



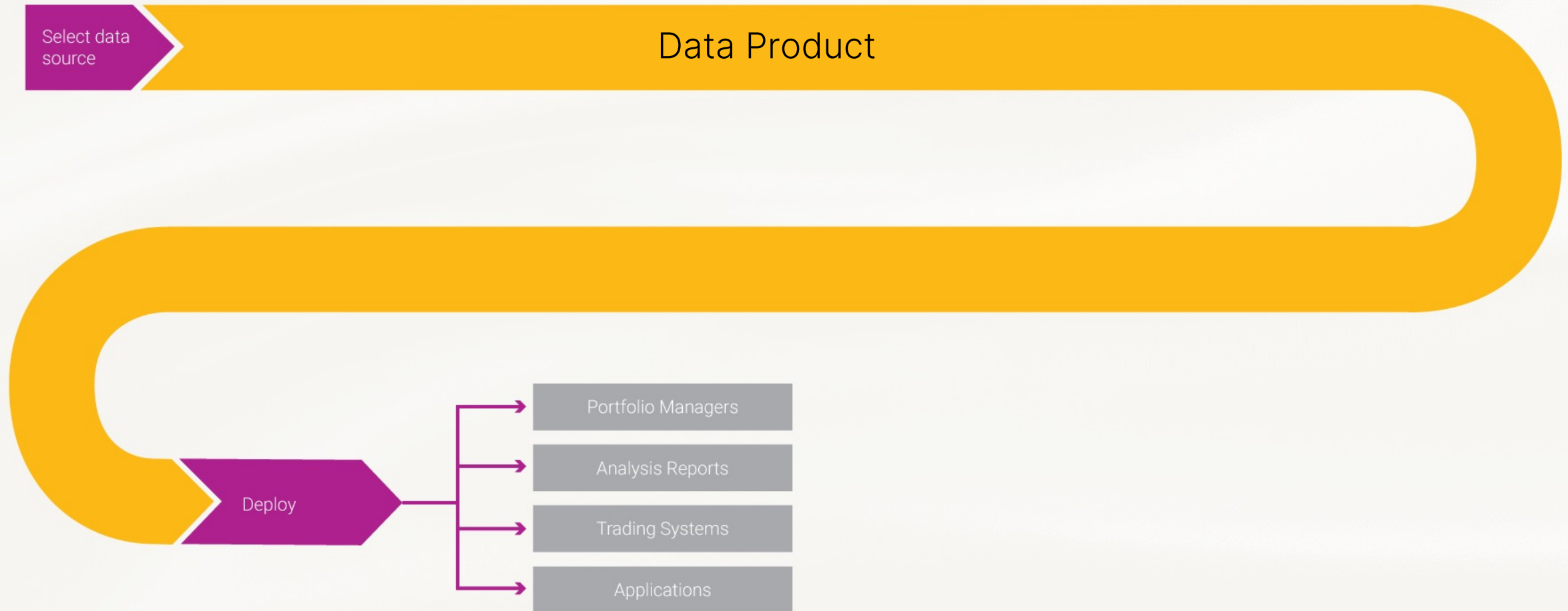
The Data Deployment Odyssey



The Data Deployment Odyssey



Data-as-Product Abstraction



Definition of Data Product

Valuable

- Commercializable
- Answers a question
- Metadata
- Documentation
- Updated regularly

Accessible

- Integrates easily
- Usable by tech and non-tech users
- Discoverable
- Customer Support

Reliable

- QA'd / Monitored
- Consistent Schema
- SLA's for Consistency, Accuracy, Timeliness
- Lineage (PIT if possible)
- Governance and Entitlements

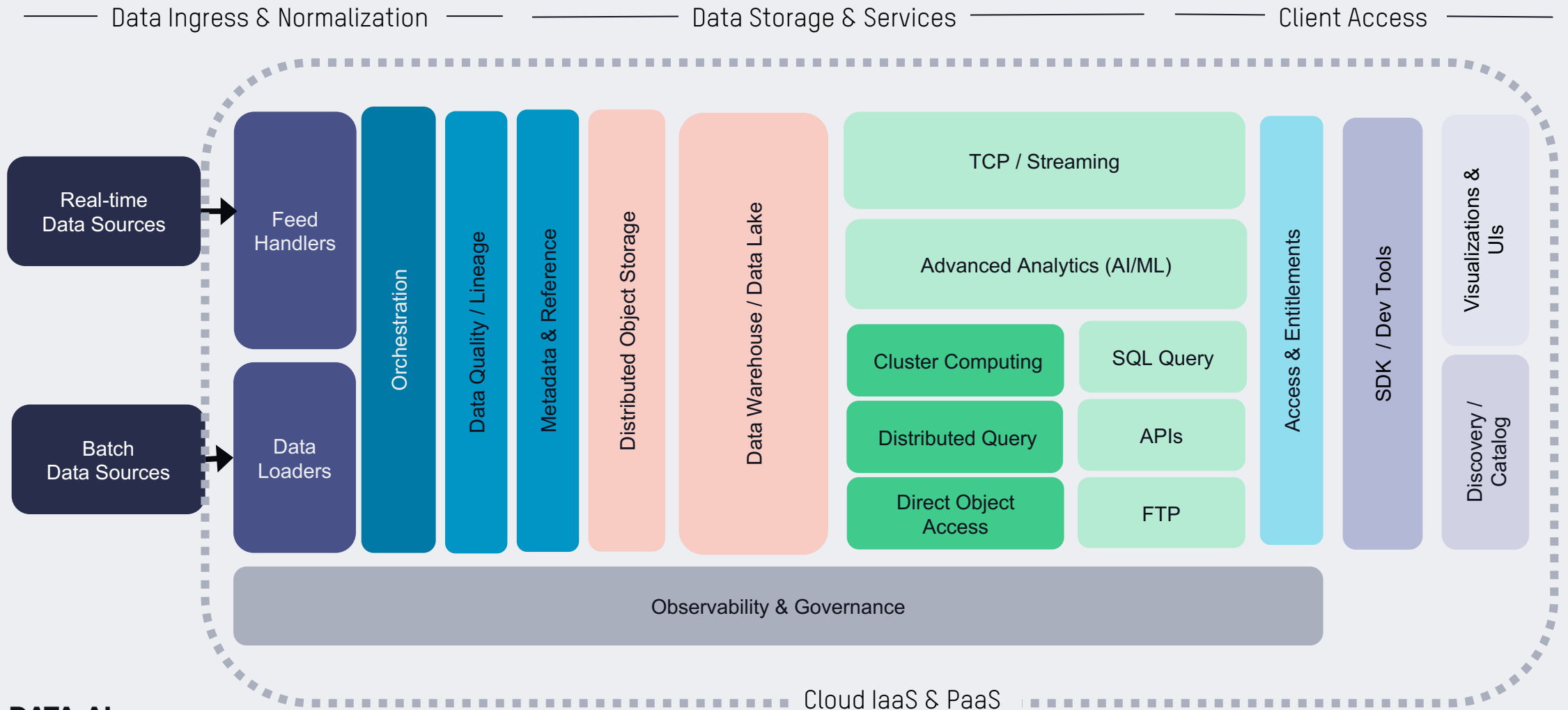
How does a Modern Data Stack enable Data-as-Product?

Modern Data Stack Paradigms

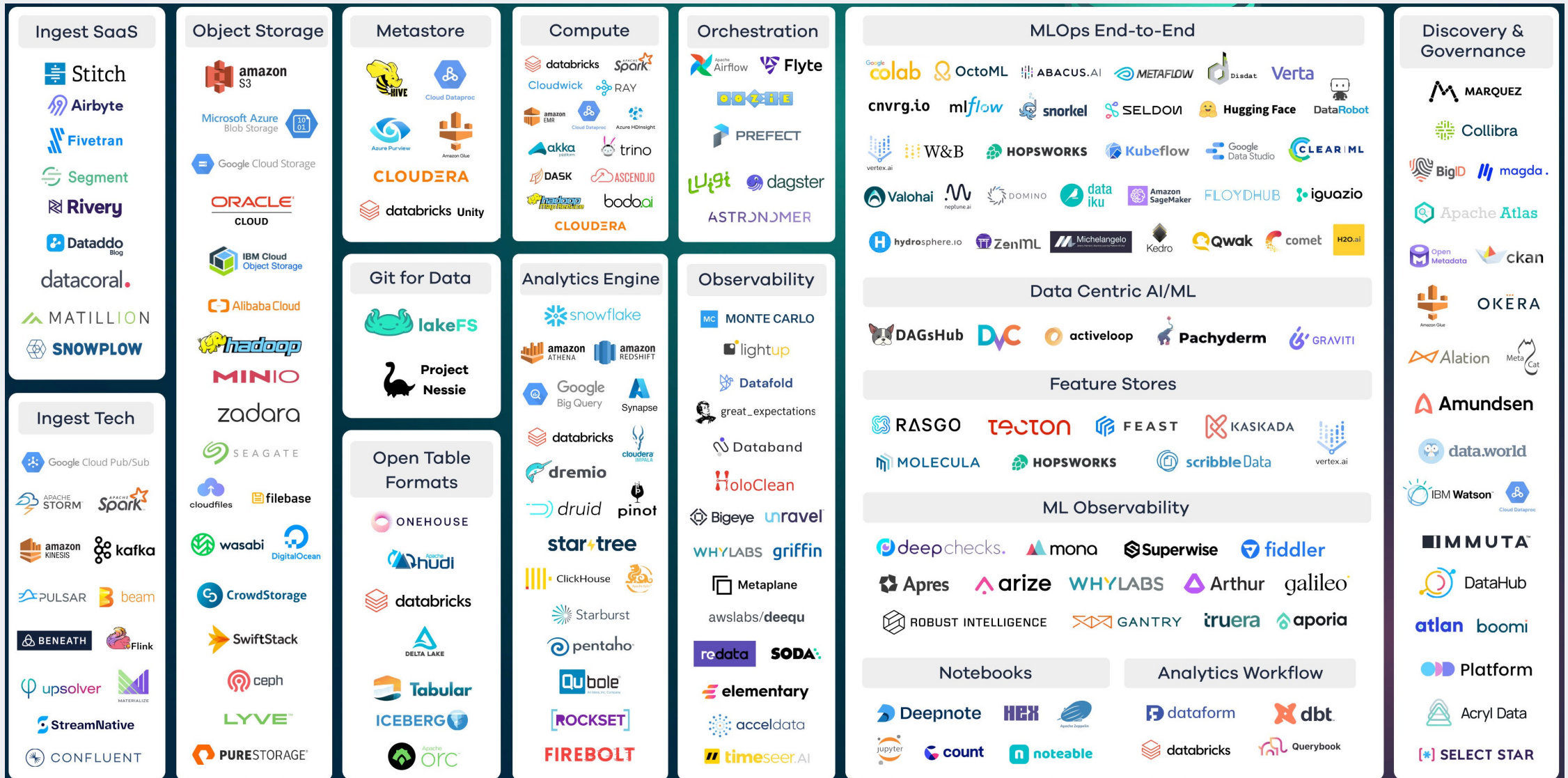
- Ease of Evaluation/Deployment
- Massively Scalable
- Component Oriented



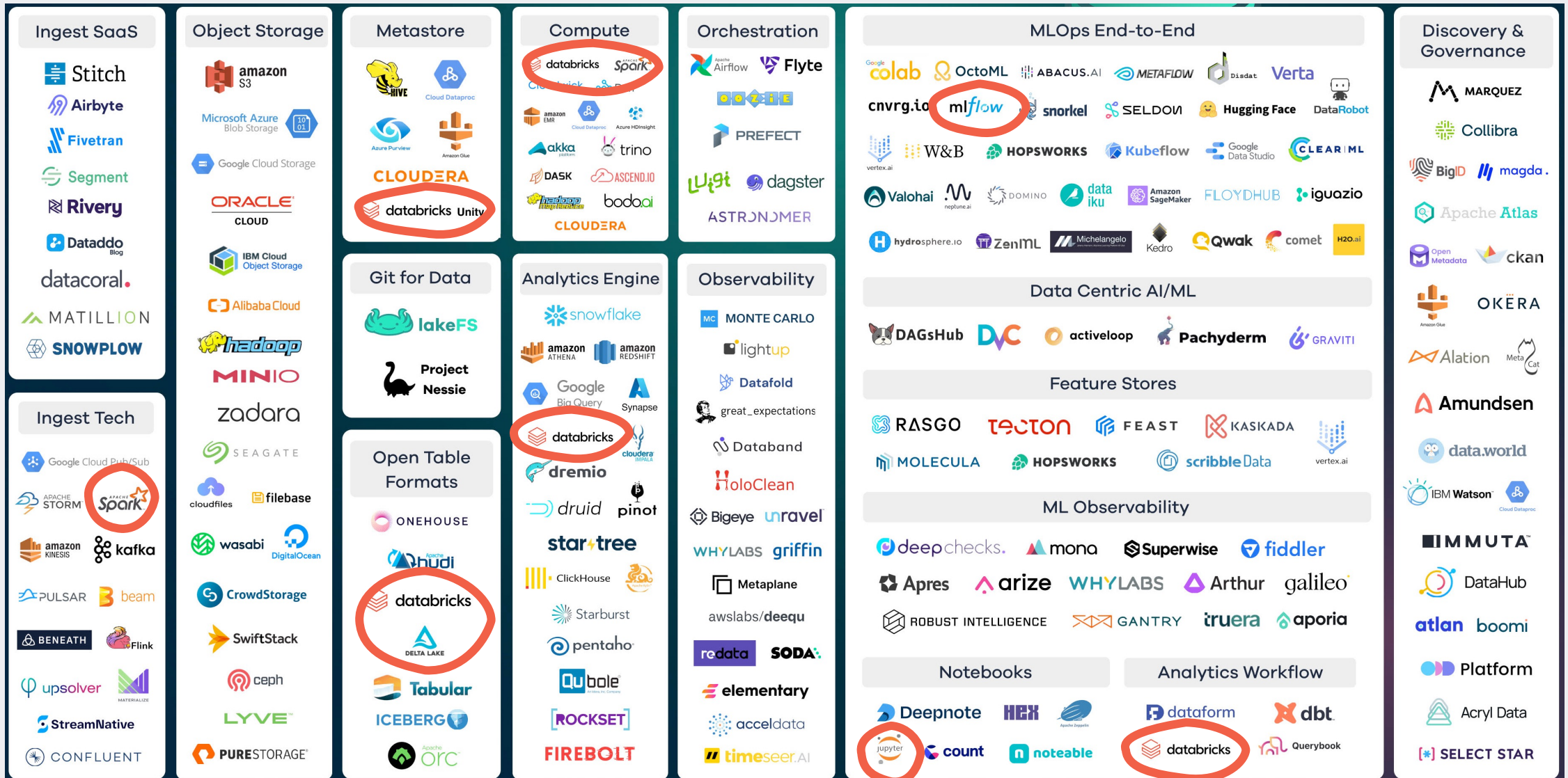
"The Layer Cake"



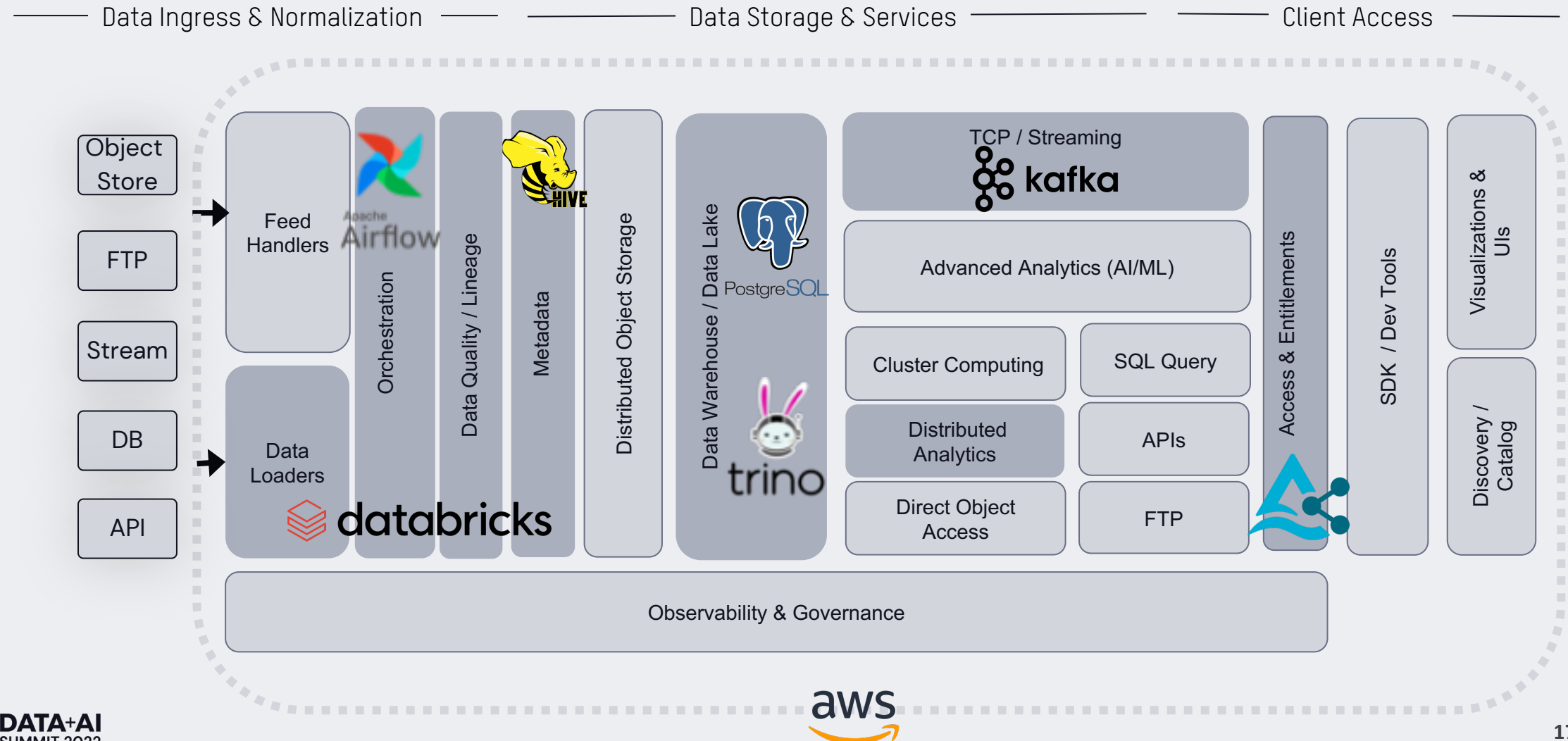
State of the Modern Data Stack 2022



State of the Modern Data Stack 2022



Nasdaq Data Link's Data Stack



Learnings

- ✓ Treating data as a product drives more value at scale.
- ✓ Modern Data Stack enables faster time-to-value and rapid adoption of new capabilities.
- ✓ Technology alone is not sufficient –think holistically about evolving people, processes, and tools.

DATA+AI
SUMMIT 2022

Thank you