



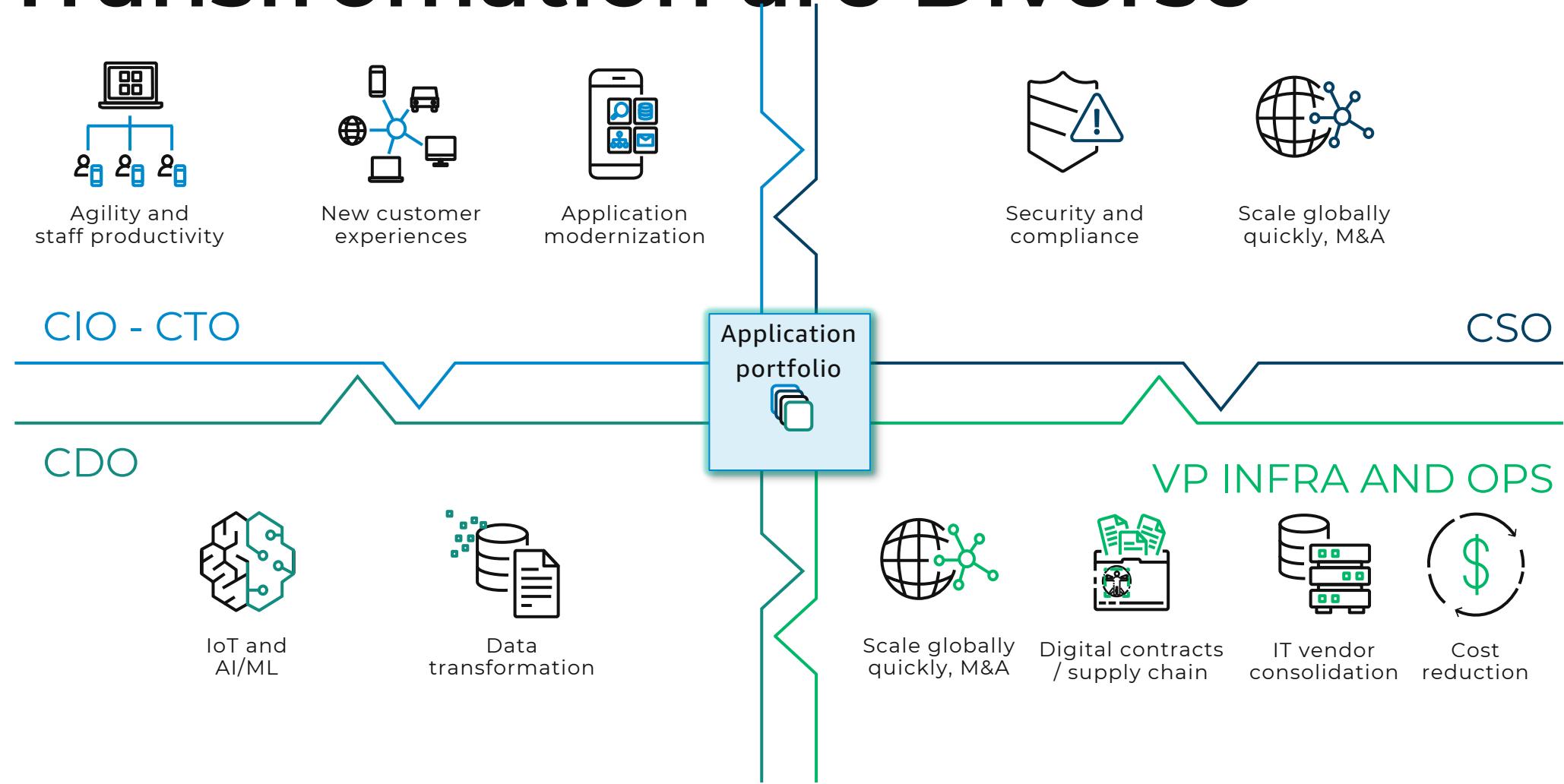
# Enterprise Guide: A Journey of Advancing Analytics Capabilities

John Mousa

Sr. Solutions Architect | AWS DACH Enterprise



# Enterprise Goals for Transformation are Diverse



VALUE



INITIAL

FUNCTIONAL



Big Data Days 2022



DATA-  
DRIVEN

CLOUD NATIVE



CONTINOUS  
INNOVATION



TIME

Platform

Security and  
Compliance

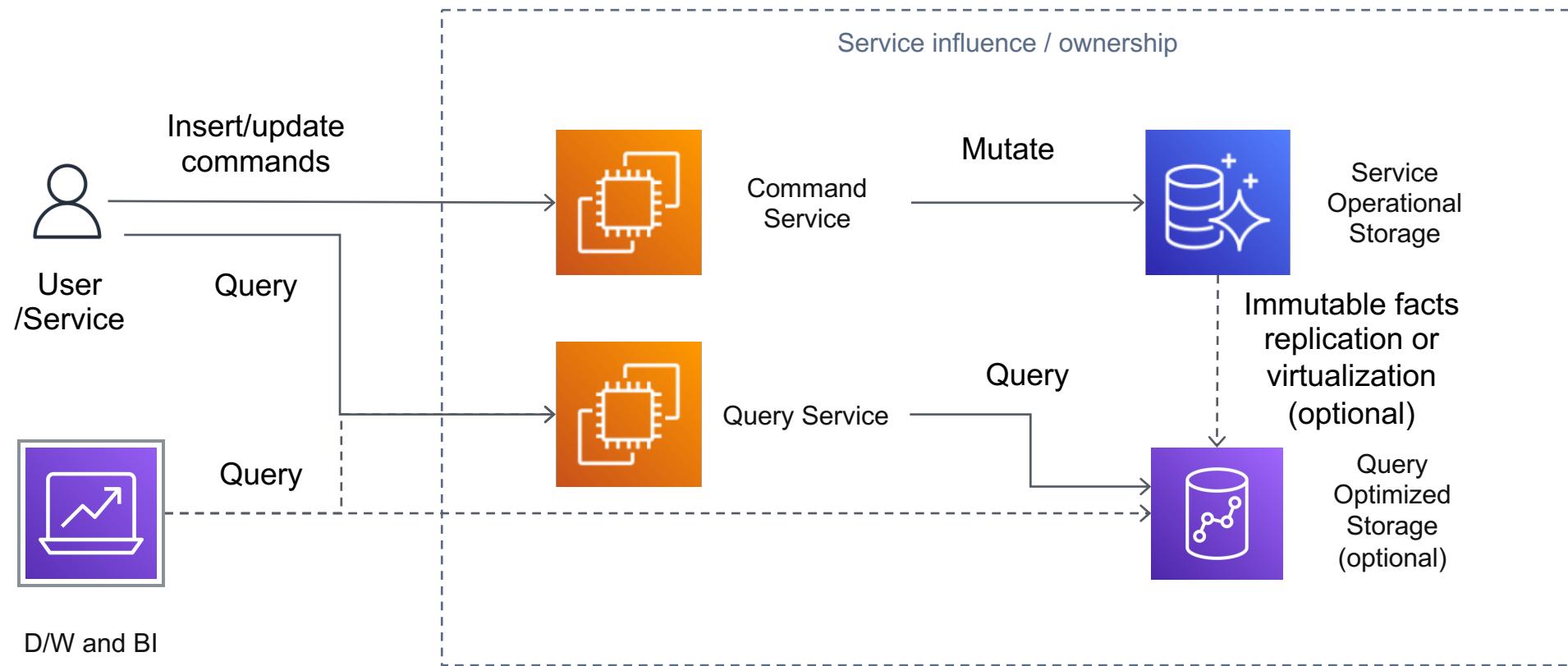
People

Analytics

Operations

# Extract Data from Source Systems

Command Query Responsibility Segregation - CQRS



# Challenges to Watch Out For

- Oops, I used my BI tools for analytics
  - Push back immutability and basic cleaning logic to source
  - Support skills and knowledge gaps
- Buy vs Build
- Where to start?

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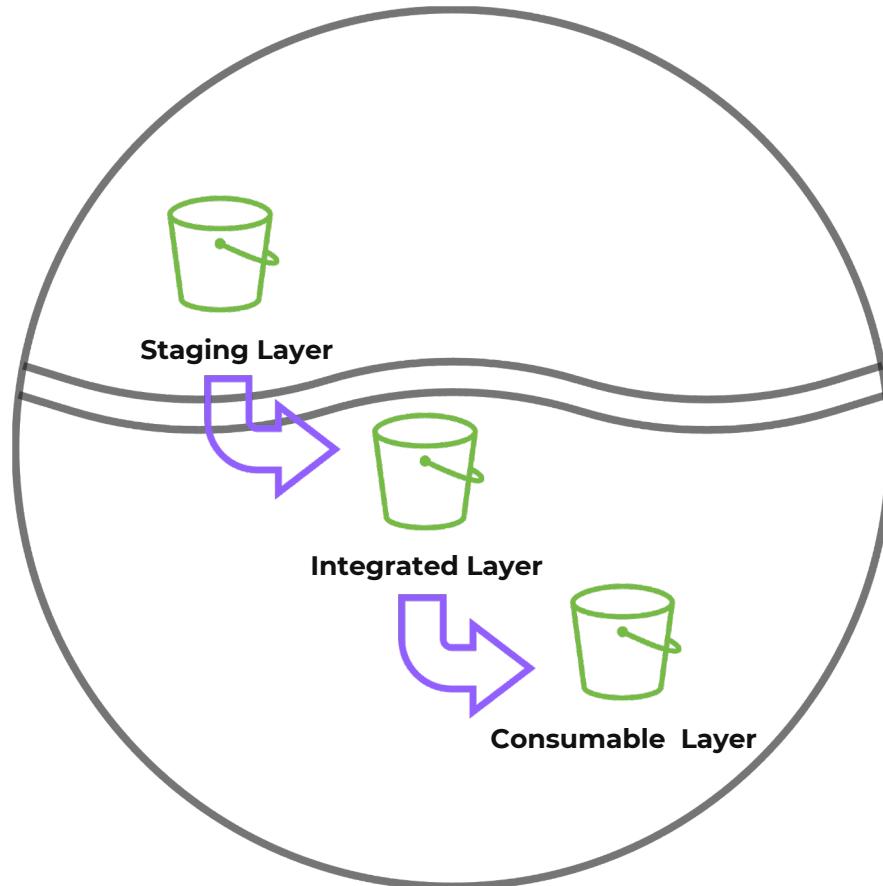
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# Solutions to Consider



## Staging Layer

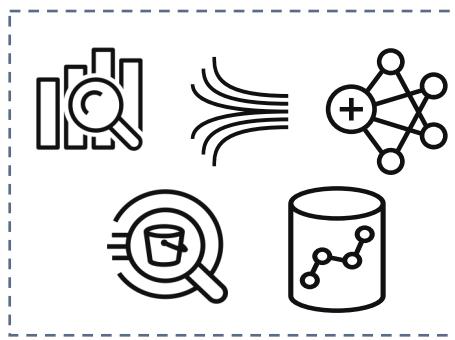
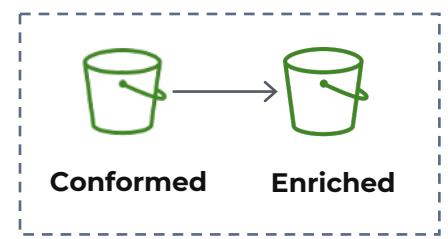
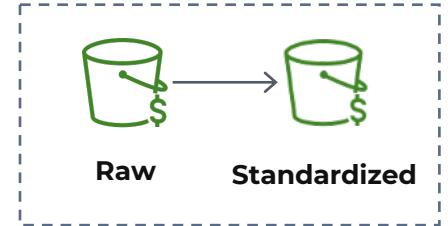
- Factual source data for all time
- Data treated as immutable
- Cost effective

## Integrated Layer

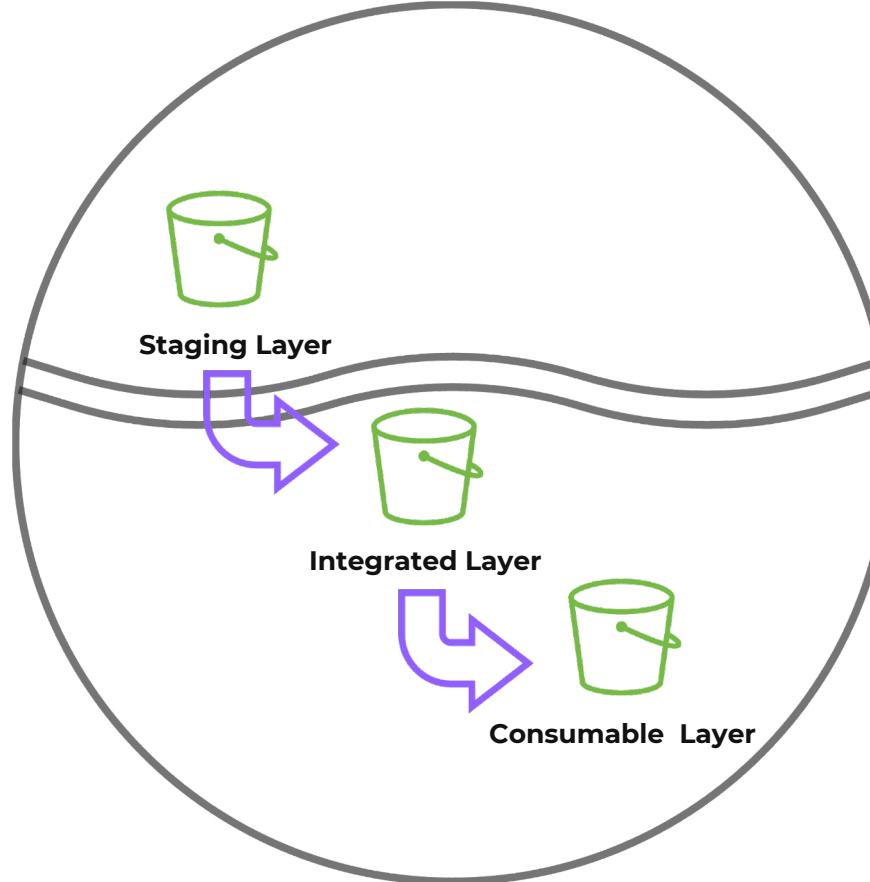
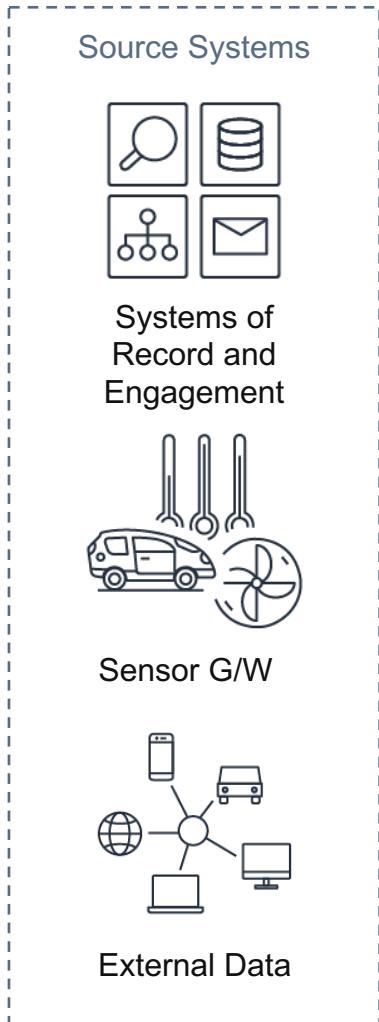
- Trustworthy
- Accessible, **Interoperable**
- Valuable

## Consumable Layer

- Application-Specific format and granularity
- Fits consumer's technology
- Abstracts **Integrated layer**



# Modern Data Strategy in Action



## Data Scientists

Exploration, Integration,  
Predictive Models



## Data Experts

Ad-hoc Reports, Exploring  
KPIs



## Business Users

Dashboarding, Slice &  
Dice, What-if

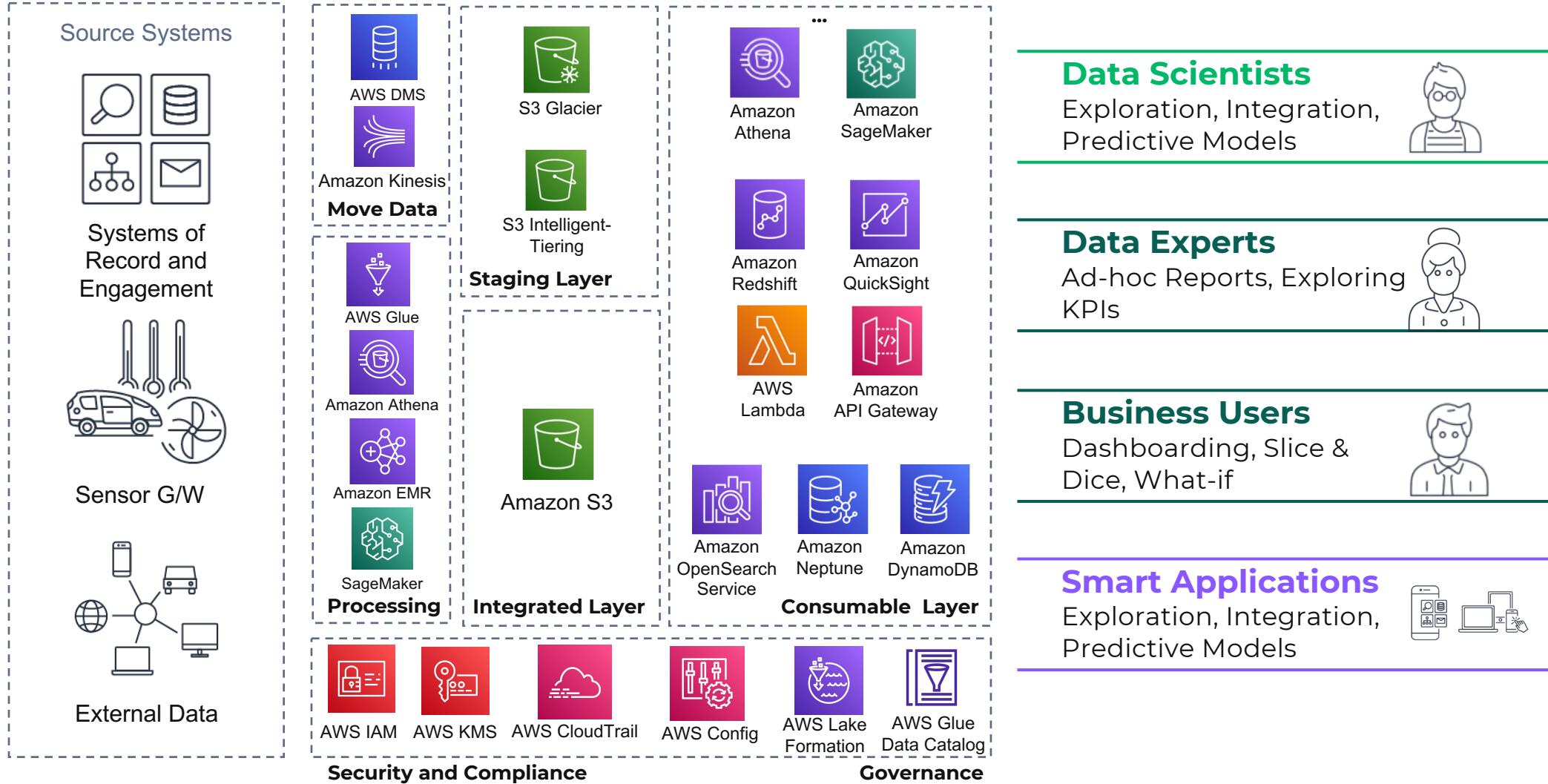


## Smart Applications

Exploration, Integration,  
Predictive Models



# Modern Data Strategy in Action



# Challenges to Watch Out For

- Personas are not involved
  - You have no data product owner
- IT or Infra team over indexing on owning and executing
- You get caught up in the “Platform” discussion
  - Enterprise wide RfP for one solution

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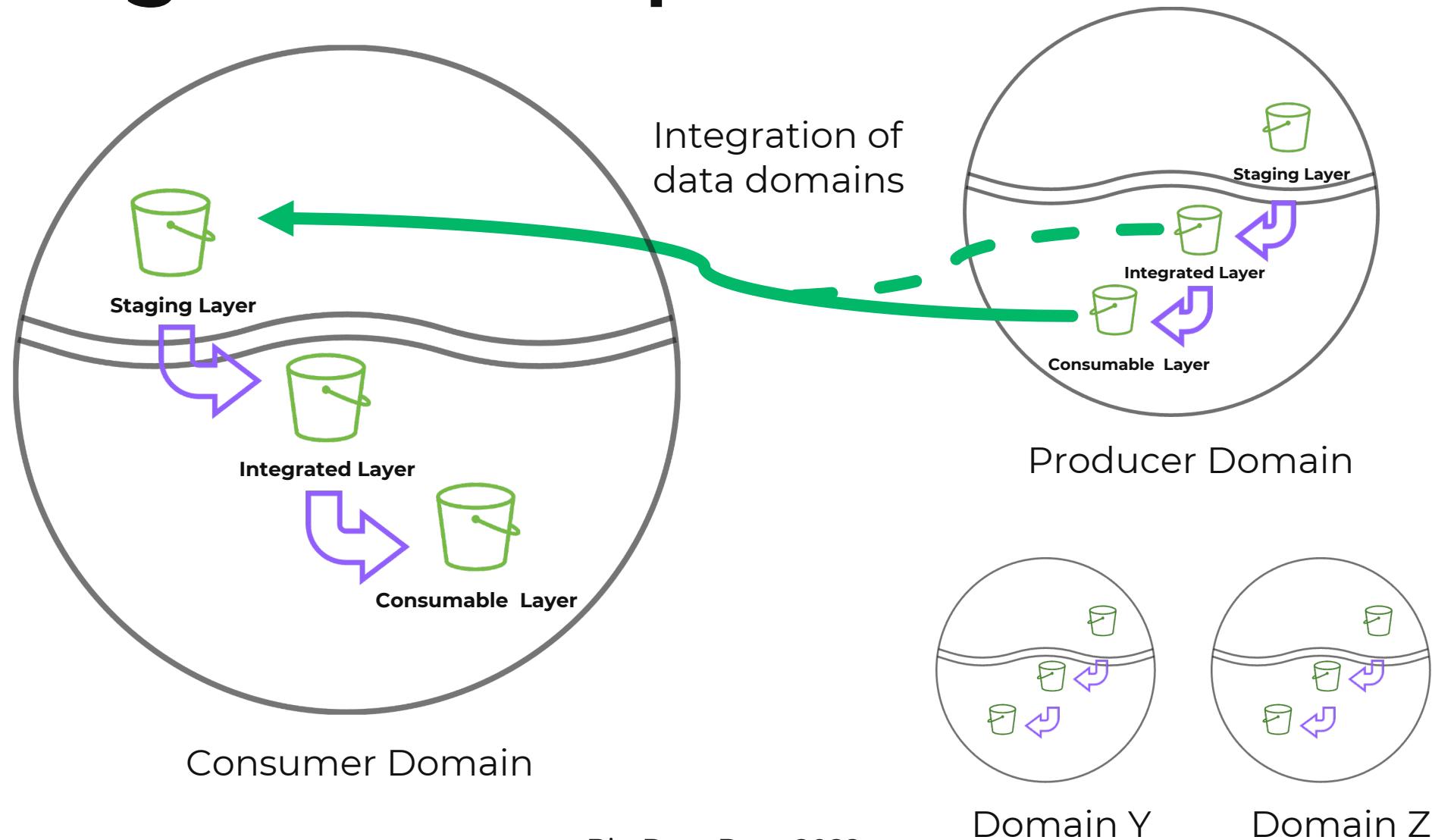
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# Integrate Enterprise Domains



# Challenges to Watch Out For

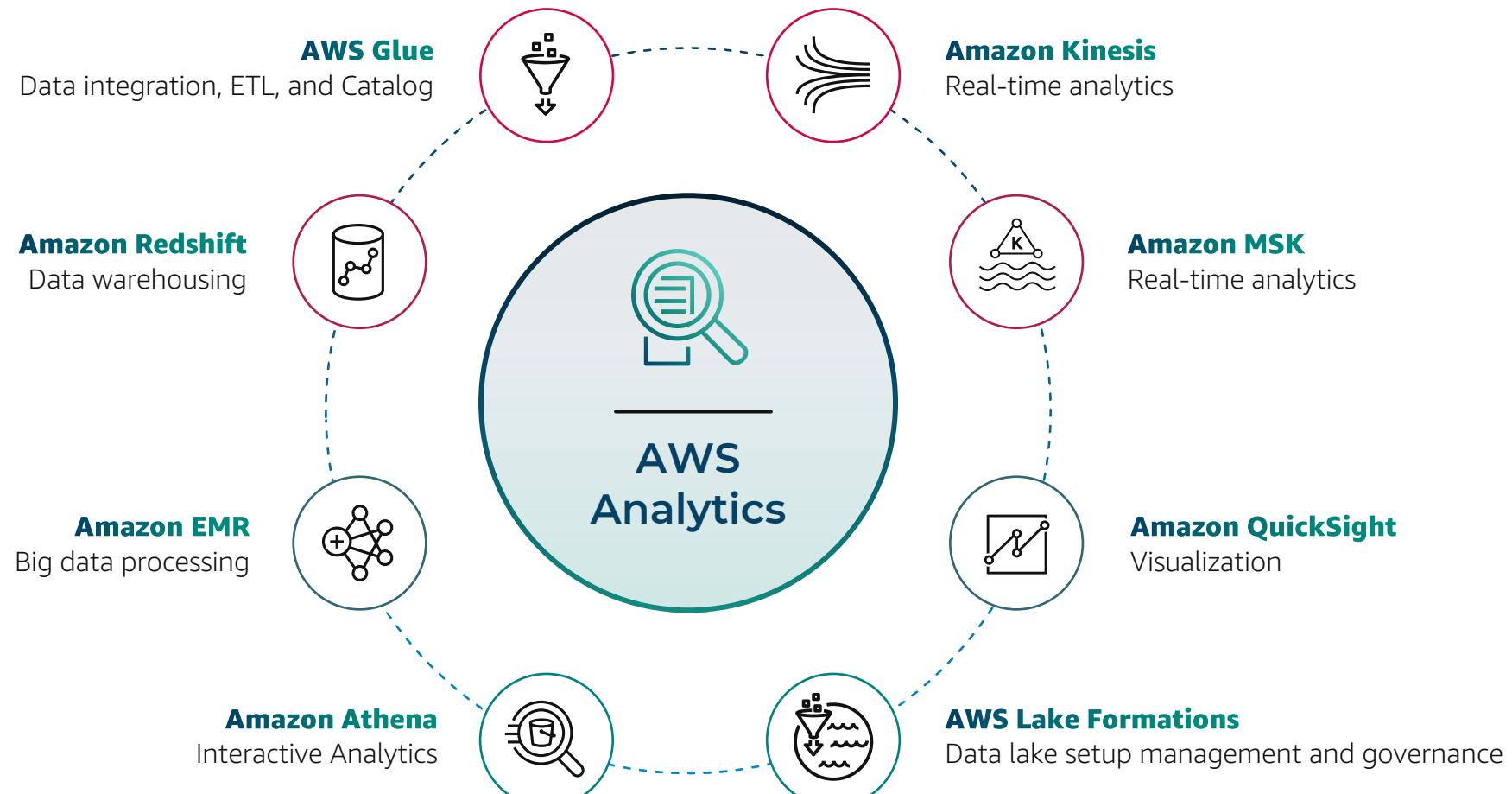
- Silos are forming up
  - You're not building modern data silos
  - Govern consumable solutions vs your interoperable integration layer
  - Discoverability
- Building Entity360 views by integrating the whole world
  - Work backwards from specific use cases
  - Aggregate cohesive entities
- Aggregates that are owned by IT

# It's Definitely a Journey

- Ownership drives long-term **Value**
- **Work backwards** from use-cases, don't build technical platforms
- Architect for **flexibility**
- Modern Data Strategy is an **Analytical Pattern** for **2-way door** decisions
- You're one **Experiment** away

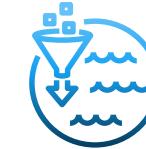


# AWS has the most serverless options for data analytics in the cloud



# AWS Lake Formation

*BUILD A SECURE  
DATA LAKE IN DAYS*



Build data lakes quickly



Simplify security management



Provide self-service access to data

# More Resources

- Modern Data Architecture [Whitepaper](#)
- Derive Insights from AWS Modern Data [Whitepaper](#)
- AWS serverless data analytics pipeline reference architecture [blog post](#)
- AWS Prescriptive Guidance – [Enabling data persistence in microservices](#)
- Data Lake Foundation on AWS – [Quick Start](#)



# Thank you, Questions?

<https://eventbox.dev/survey/LWTO3RS>

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