



HYLAND SUMMIT DÜSSELDORF

Analytics capabilities model

A journey for data-driven insights

John Mousa

Sr. Solutions Architect
Amazon Web Services



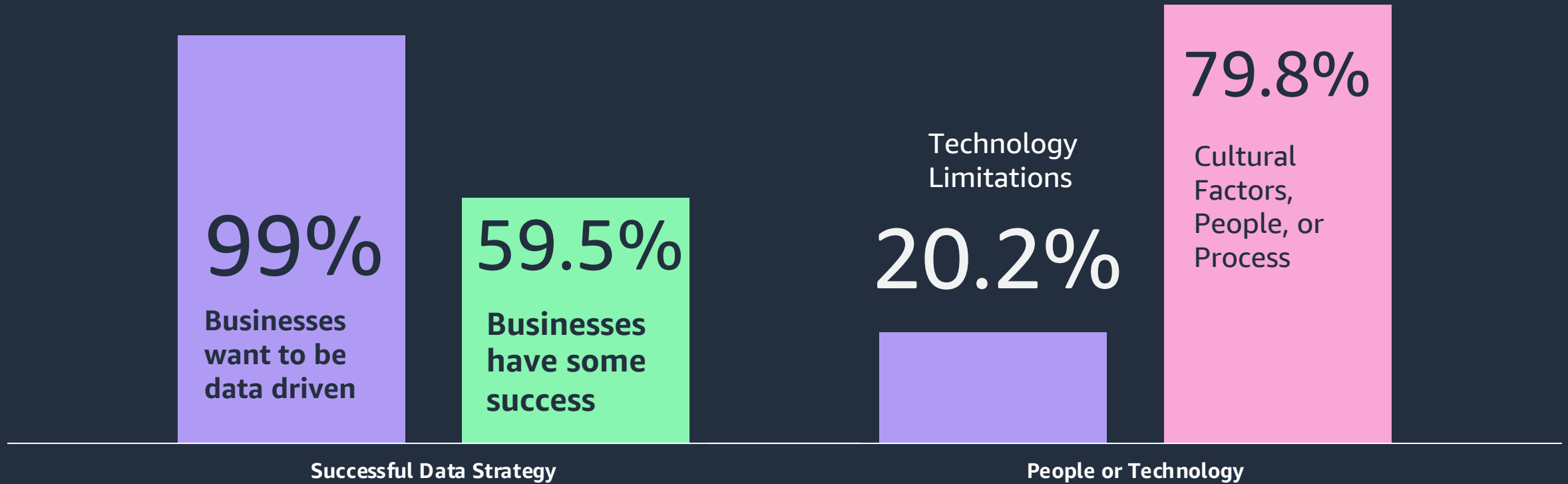
John Mousa

Engineer at heart, enabling digital native businesses in Germany and world wide bridge the worlds of microservices and analytics as a Sr. Solutions Architect at Amazon Web Services.



Data strategy is crucial today

COMPANIES OF ALL SIZES REALIZE THE IMPORTANCE OF DATA IN TODAY'S TECHNOLOGICAL LANDSCAPE



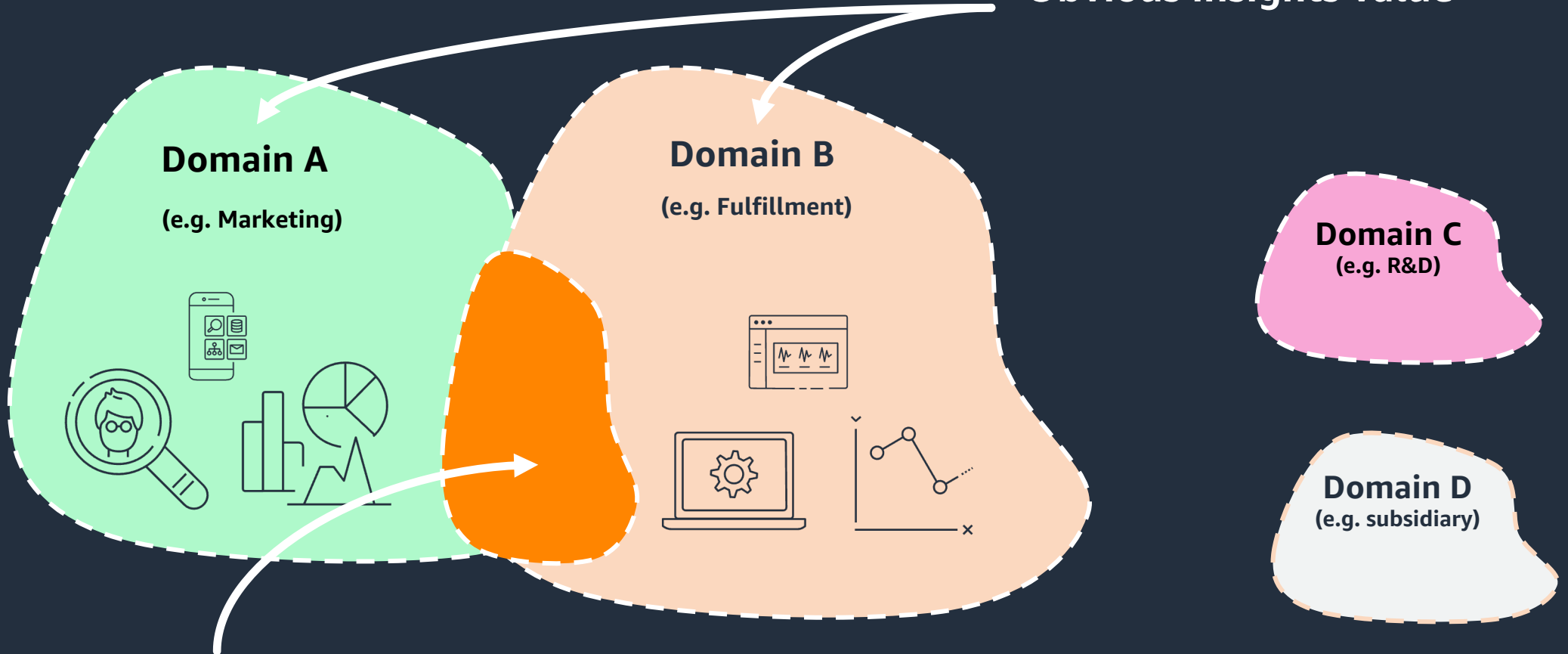
[Data and AI Leadership Executive Survey 2022](#)



Data integration value for business scalability

DATA-DRIVEN AND BEYOND

Obvious insights value



Differentiating integration value

Meet the team

FUNCTIONAL



Buzz
from business

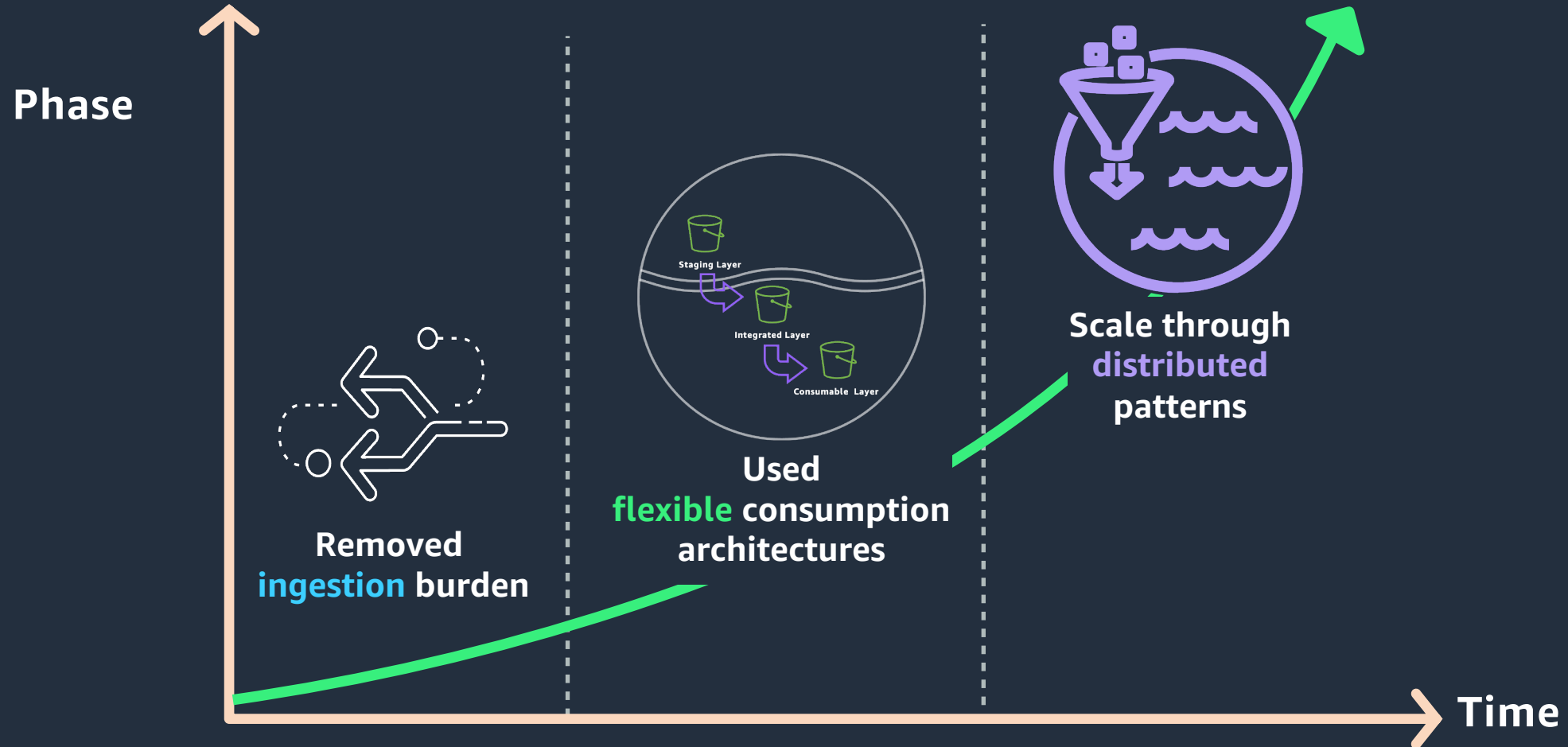


Barbara
the data scientist



Dany
the data architect

Advancing analytical capabilities model



Adoption challenges



Remove
ingestion burden



Data adapters and patterns

ARCHITECTURES FOR NON DISRUPTIVE PRODUCT CREATION

Build effort

0 - ETL

Aided

DIY, CQRS



Amazon
AppFlow



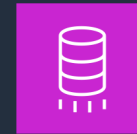
Amazon Aurora
0-ETL



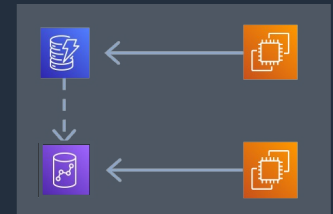
Amazon Athena
Federated queries



Amazon DynamoDB
Streams



AWS
Database Migration
Service

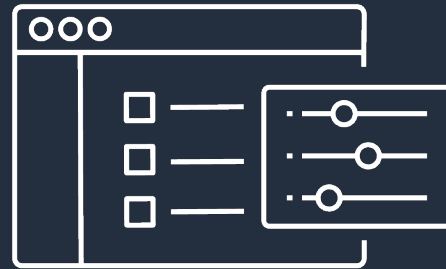


Challenges to watch out for

INITIAL



Remove
ingestion
burden

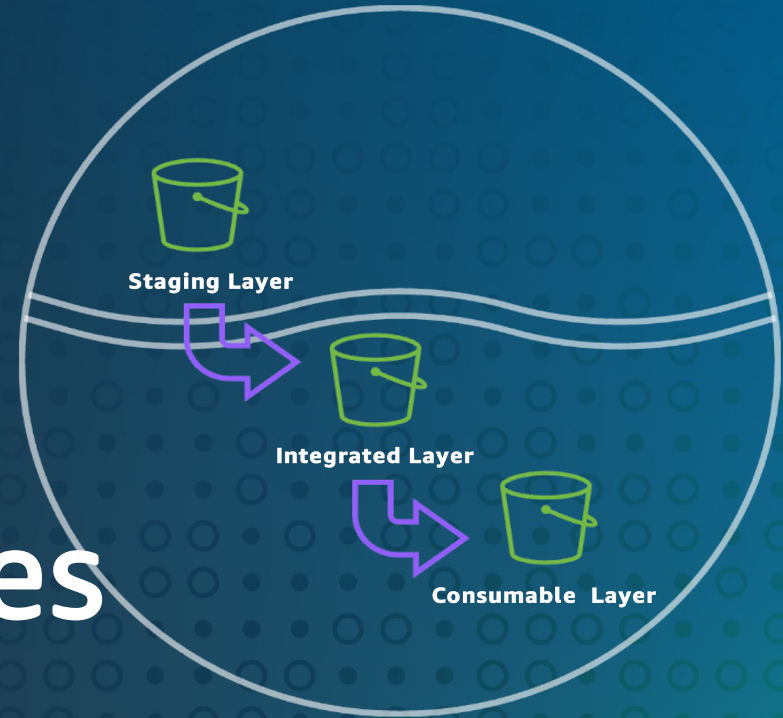


Don't overuse
bespoke
Business Intelligence
tools



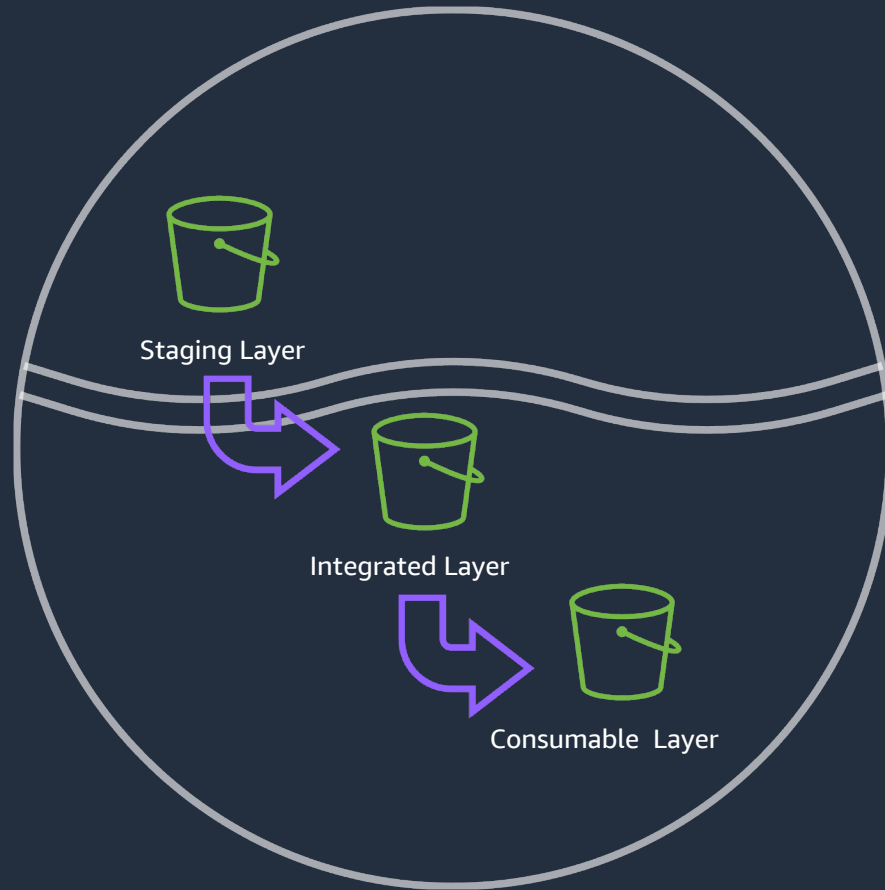
Look for
object storage
support

Consumption challenges



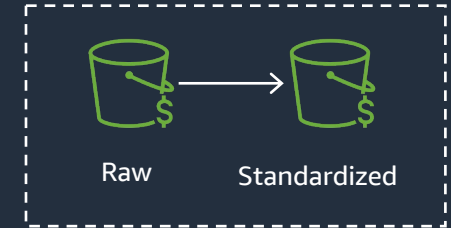
Use
flexible consumption
architectures

Modern data architecture for flexible consumption



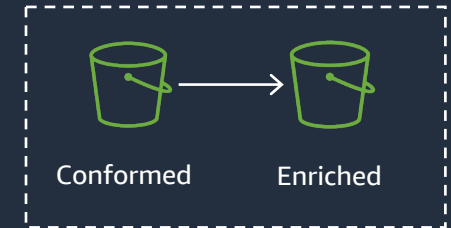
Staging Layer

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



Integrated Layer

- Trustworthy
- Accessible, interoperable and open
- Valuable



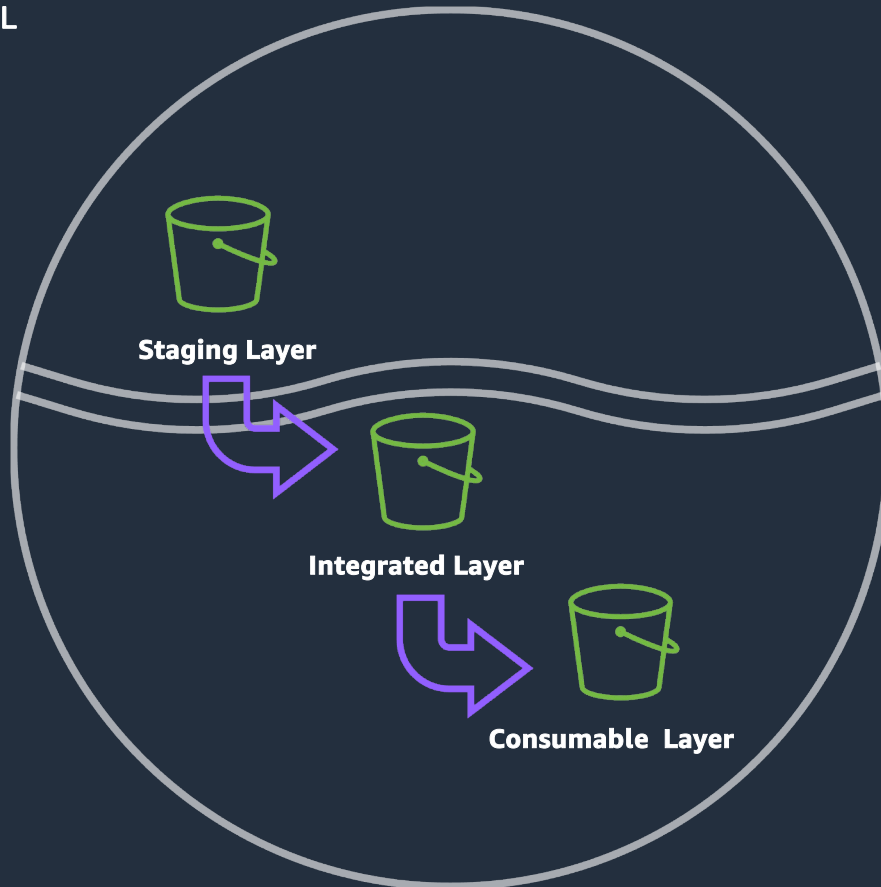
Consumable Layer

- Application-Specific format and granularity
- Fits consumer's technology
- Adds flexibility to integrated layer



Stakeholders

FUNCTIONAL



Barbara the data scientist
Exploration, Integration,
Predictive Models



Dany the data expert
Ad-hoc Reports,
Exploring KPIs



Buzz from business
Dashboarding, Slice &
Dice, What-if

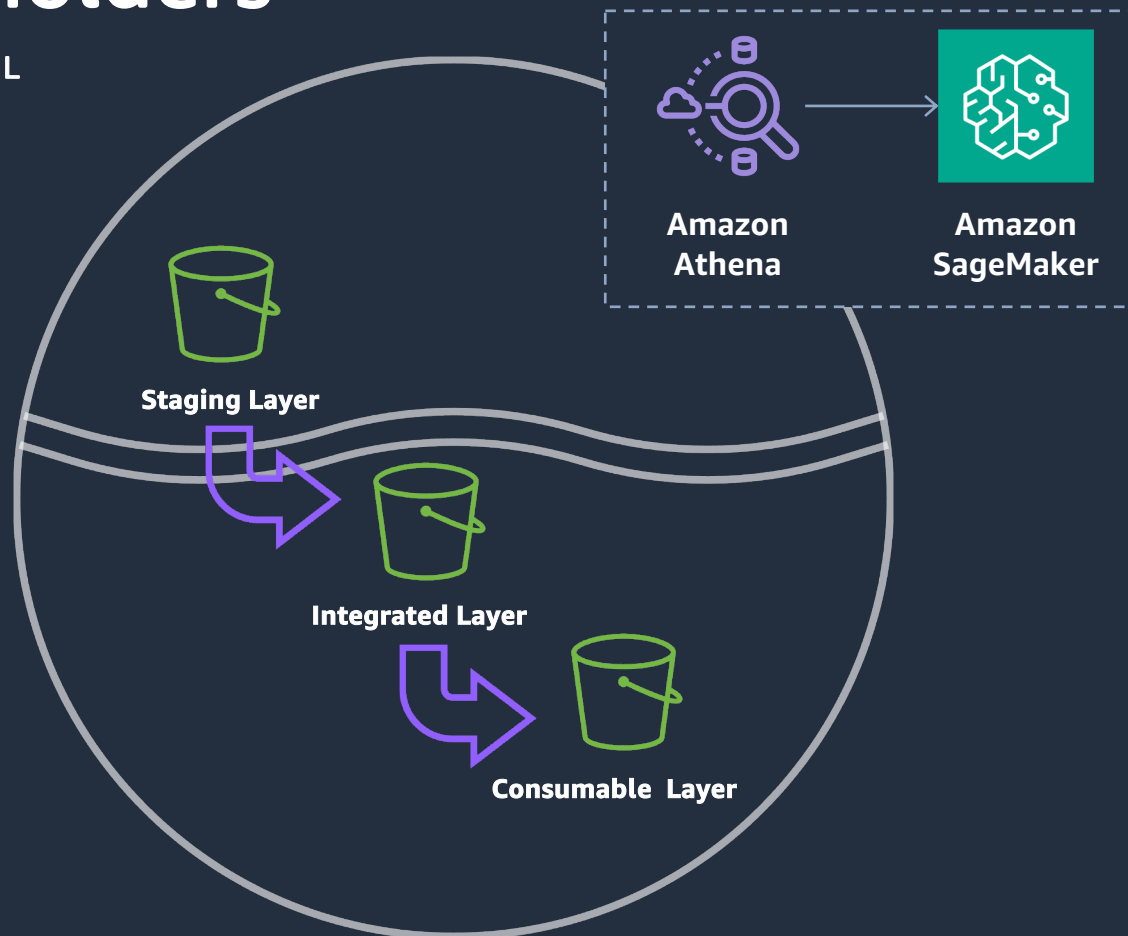


Smart Applications
Exploration, Integration,
Predictive Models



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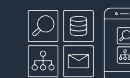
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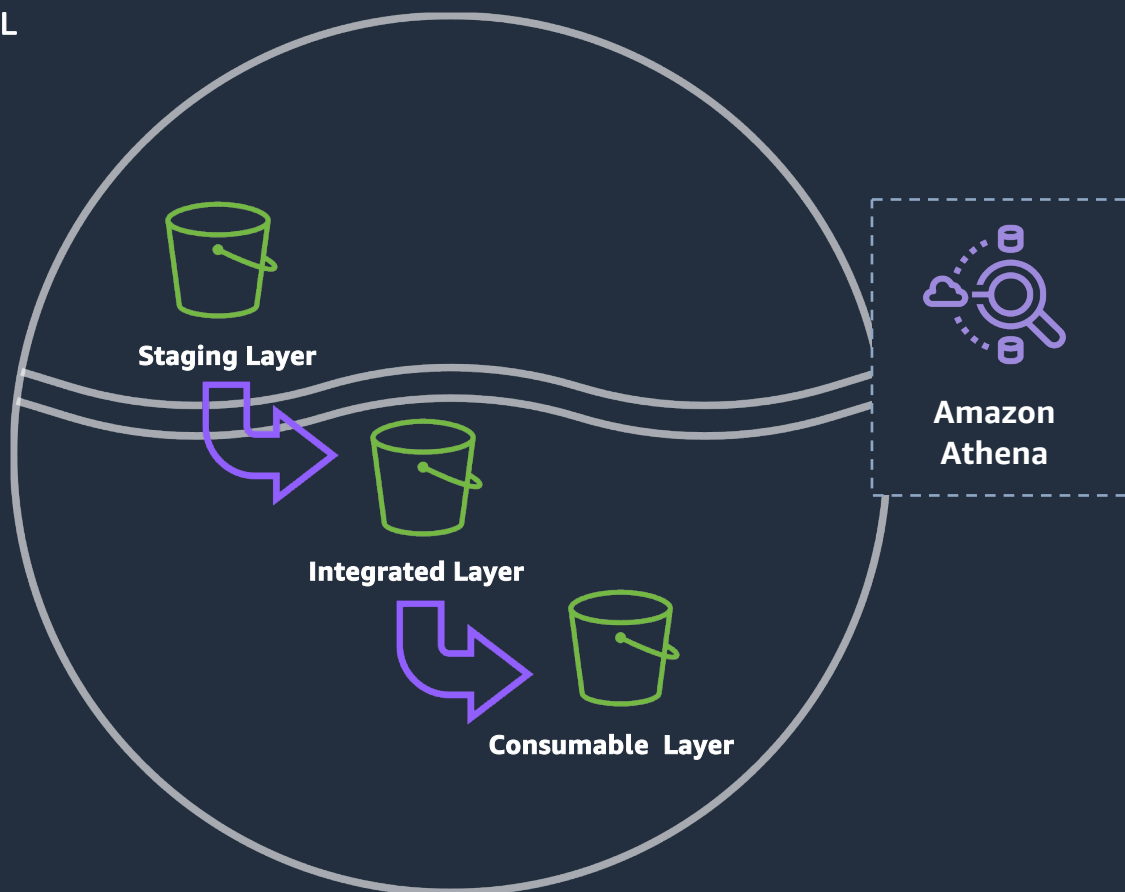


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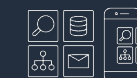
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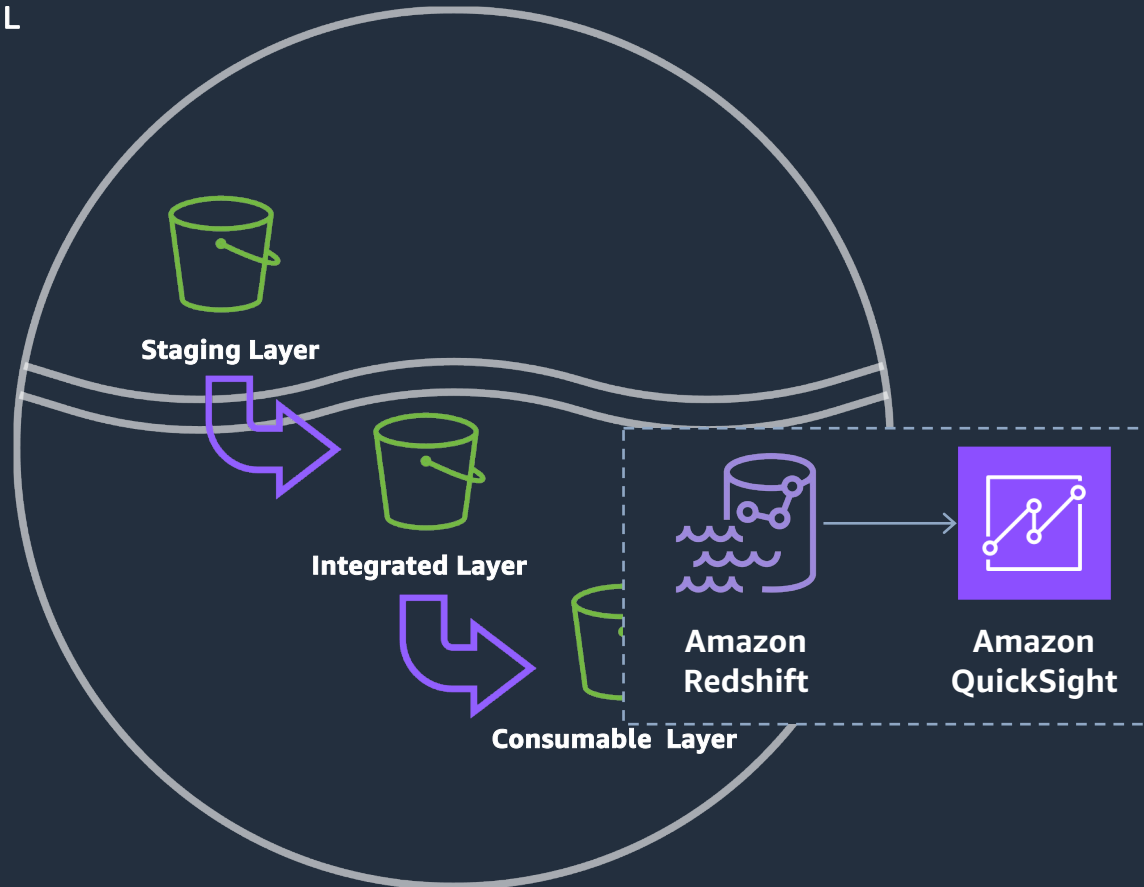


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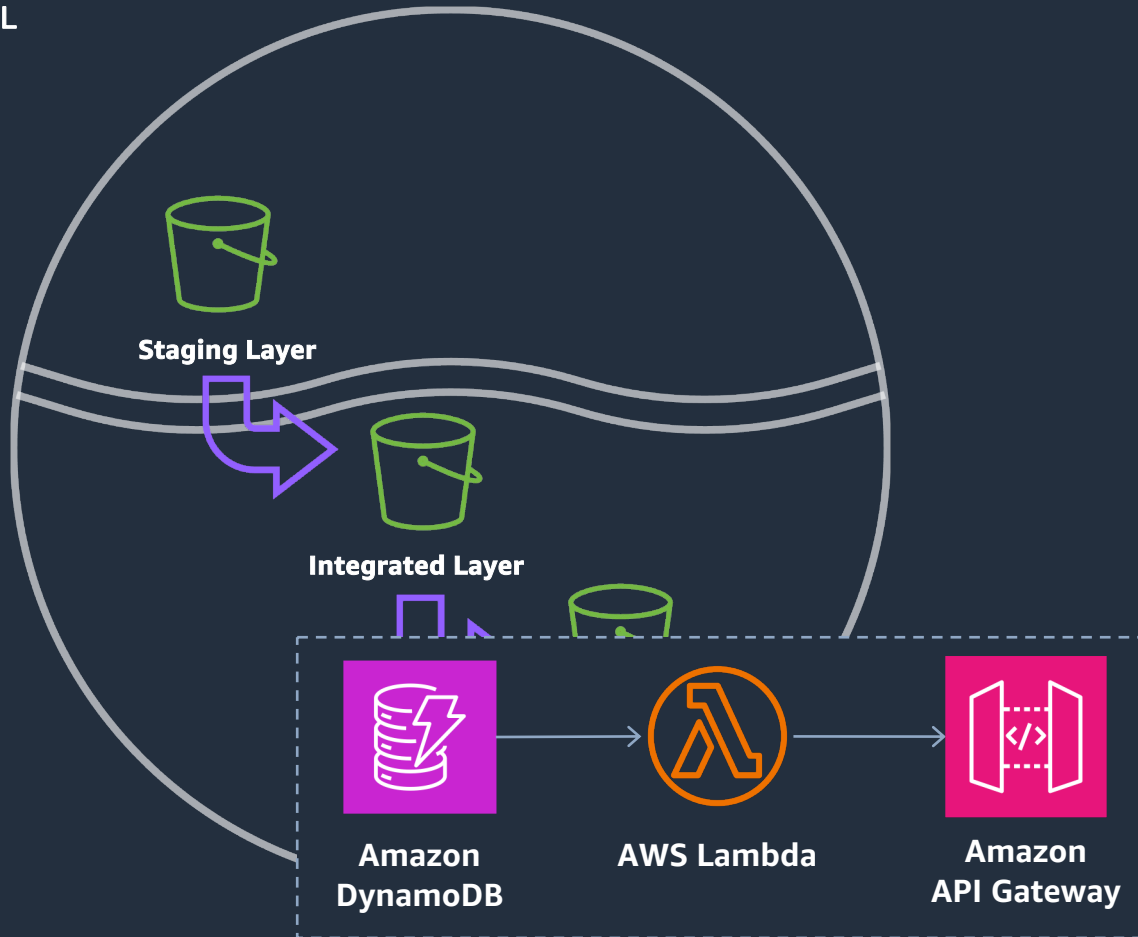


Smart Applications
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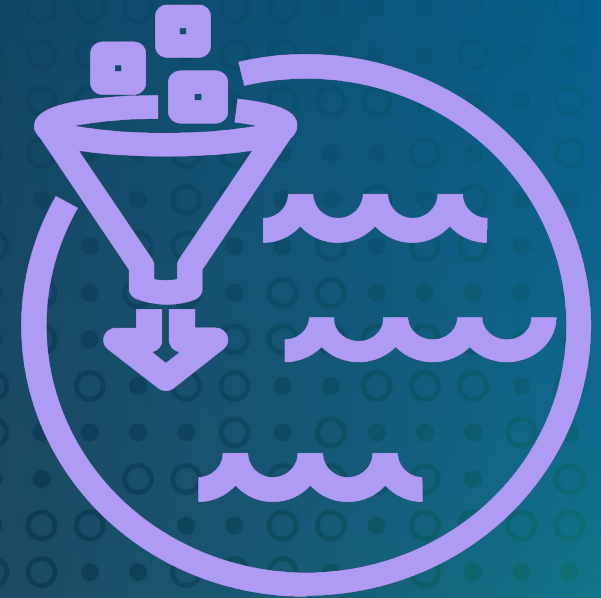
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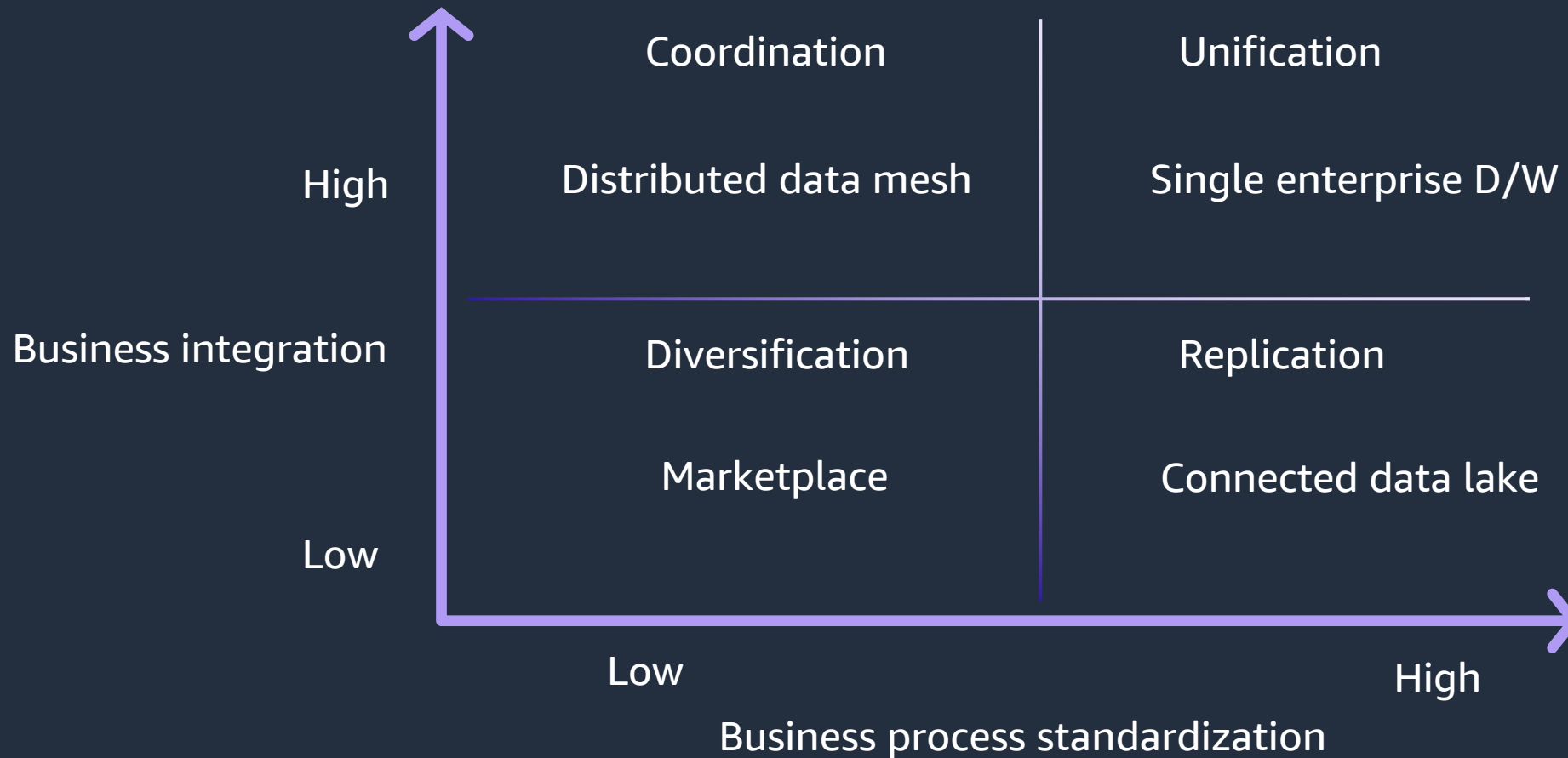


Scaling challenges



Scale through
distributed
patterns

Right-level of autonomy for scaling



The data strategy challenges hindering innovation



Bypassing **compliance**



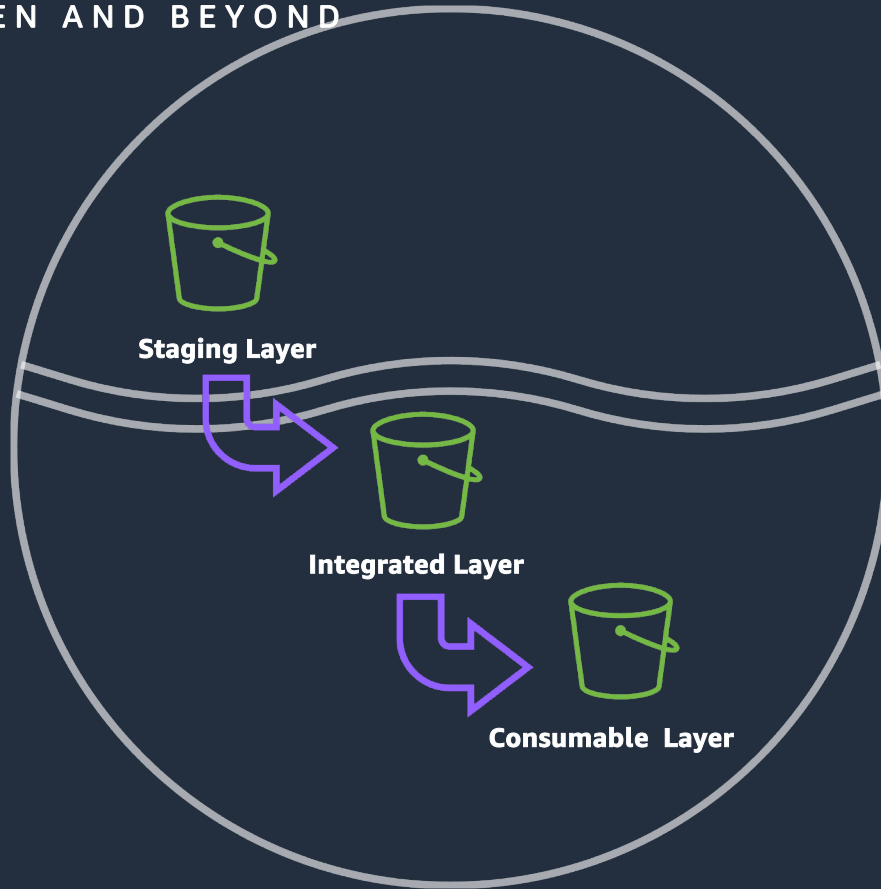
Split brains



Missing **opportunity**

Hub and Spoke approach for Integration

DATA-DRIVEN AND BEYOND



Marketplace

- Frictionless
- Discoverability
- Consumer incentives
- Producer incentives
- Operator incentives



Go Beyond with Amazon DataZone

UNLOCK DATA ACROSS ORGANIZATIONAL BOUNDARIES WITH BUILT-IN GOVERNANCE

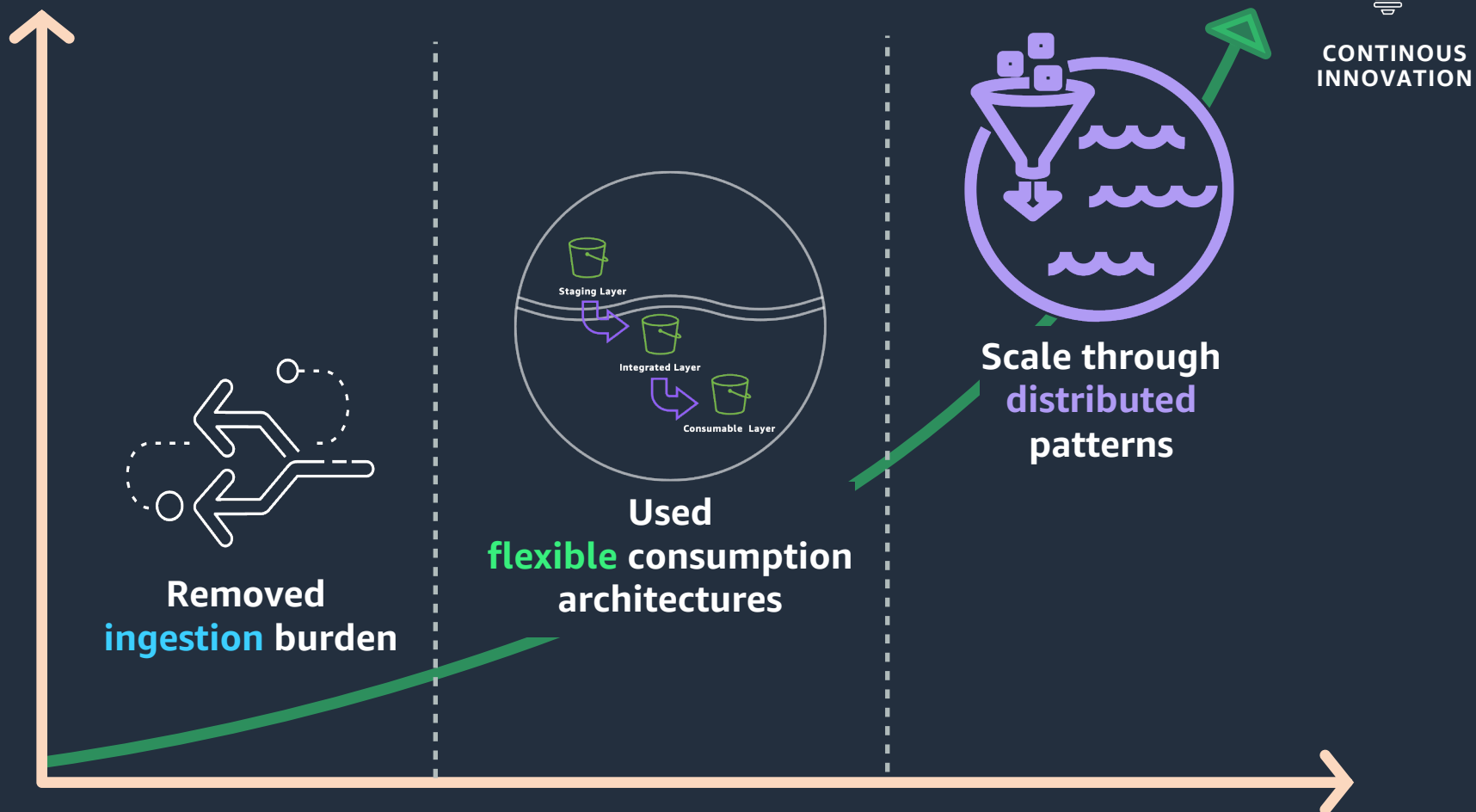


End of story?



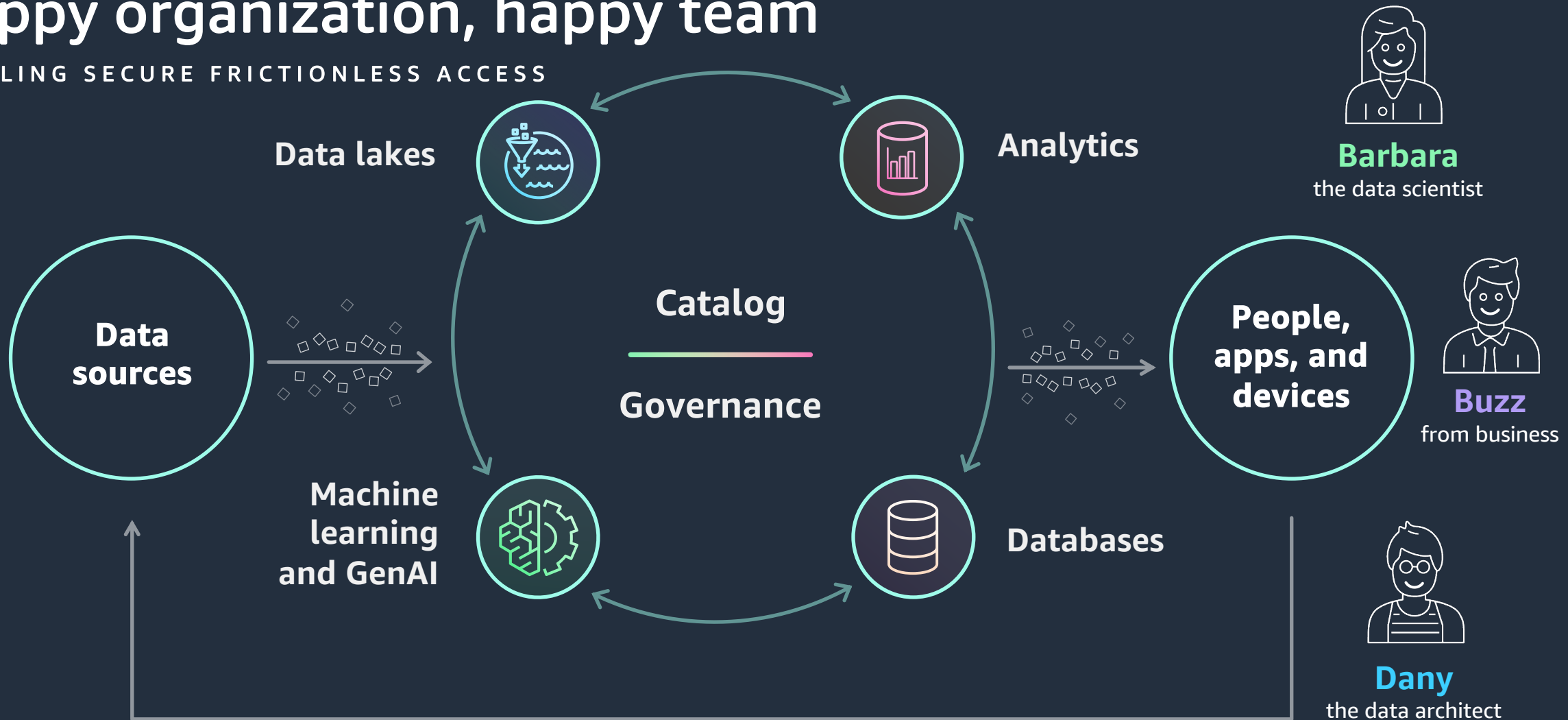
Evolutionary architecture

MEET YOUR ORGANIZATION IN THE RIGHT PLACE IN ITS JOURNEY



Happy organization, happy team

ENABLING SECURE FRICTIONLESS ACCESS



More Resources

- Data strategy [Guidance](#)
- Modern Data Architecture [Whitepaper](#)
- Derive Insights from AWS Modern Data [Whitepaper](#)
- Well Architected Framework – [Analytics Lens](#)



Thank you!

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<https://pulse.aws/survey/XDQNGJKR>