

### What is a Data Mesh?

A Data Mesh is a decentralised approach to sharing and managing analytical data at scale. The Mesh emphasises data as a product, ownership of data by domain experts, federated governance and a shared data platform.

Adoption of a Data Mesh can significantly accelerate business innovation for data heavy organizations.

### Common data challenges

- Overworked centralised data team causing bottlenecks
- Operational databases running analytics causing performance issues
- Excessive use of ETL jobs
- Poor data quality and governance (a data swamp) leading to security risks and opportunity cost
- Siloed, difficult to access data assets
- Accidental data architecture

### Why now?

The growth in scope and capability of AWS data services means that the technology to realise a data mesh is readily available today.

### Data Mesh Accelerator

Enables customers to rapidly pilot and explore the benefits of a data mesh in a risk-free environment, short circuiting analysis paralysis. Using our templates and expertise in data services such as:

- S3, AWS Glue, Athena, Redshift, AWS Lake Formation, Amazon DataZone
- Dremio, Snowflake and Databricks
- PowerBI, QuickSight.

With support to incrementally rollout the Mesh across the enterprise.

### Who can benefit?

- Organizations experiencing challenges managing and scaling data.
- Organizations planning significant migration and modernization programs.
- Companies looking to unlock innovation, and GenAI use cases can gain significant advantages by getting their data strategy on a solid foundation.

### What does it cost?

- By leveraging AWS Funding programs, we minimise or eliminate all customer costs for the accelerator.

### Key Benefits of Data Mesh on AWS

- **Remove bottlenecks** - From central data team, by devolving responsibility for data products to domain experts
- **Zero-ETL integration** - Published data products that can be consumed in-place without copying
- **Evolutionary architecture** - Decoupled and decentralised architecture means that the data platform can flex and scale with the business
- **Improved data quality** - Data is published and described by decentralised expert teams
- **Increased agility** - Autonomous domains can run faster with higher agility
- **Improved data observability** - Platform monitors, data production and consumption metrics
- **Improved data provenance** - Platform can track lineage and improve auditability
- **Improved governance and security** - Data platform controls access policies and contracts centrally

### How it works



The accelerator begins with a discovery workshop. Following this we work with you to understand the data landscape of your organization and identify pilot data products and business use cases.

During the pilot phase, we deploy our Mesh Accelerators to rapidly build out a self-service platform on top of AWS native data services. We work collaboratively with internal customer teams to define data contracts and enable the creation of the pilot data products. This is an iterative and transparent process that is focused on delivering the identified business use cases.

The learnings from the pilot phase are used to develop a full incremental rollout and adoption plan for the Data Mesh tailored to your organization as a key deliverable from the accelerator.

Post the accelerator, we support the incremental rollout and wider organizational adoption of the mesh through strategic consultancy and/or hands on implementation.

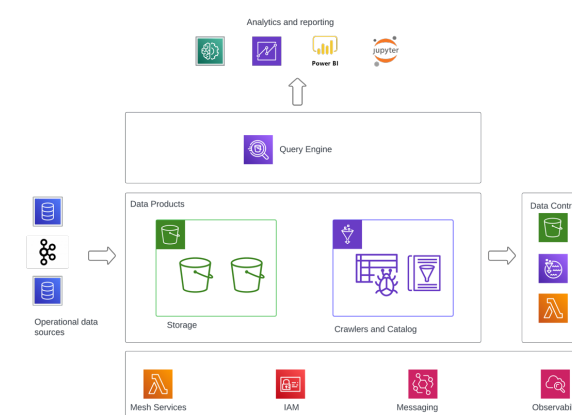
### Case Study - RenaissanceRe

#### Problem

- Data heavy global reinsurer
- Many disparate data sources
- Data trapped in silos
- Analytics running against operational tables
- Modernization of Application Portfolio

#### Goals

- Central, self-service data platform
- Support organizational domain structure
- Devolve responsibility for data to domains
- Improved observability, and data lineage
- Democratise access to data
- Evolutionary, event driven platform
- Maximize autonomy for teams



#### Solutions and Outcomes

- Increased agility across teams
- Secure democratized access to data
- Solid data foundation for future migrations
- 10TB of Data products in production
- Volume to increase 10x near term
- Zero-ETL integrations

