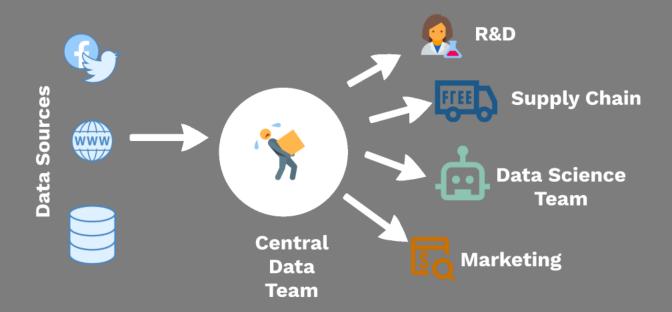
Data Mesh for data governance

Problem Statement

Centralized approach to data management can create bottlenecks, limit agility and hinder innovation.

In traditional data management, a central team or department is responsible for collecting, storing, and analyzing data. This approach can create a single point of failure and slow down decision-making, as teams have to wait for the central team to process and provide data.



Foundational principles of Data Mesh



Domain ownership

Reduce the hops between data producers and data consumers.

Data as a Product

Promote data as a product thinking. Data that is a discoverable, trustworthy and valuable on it own.

Self-serve platform

Technology to allow domain teams to autonomously build, share and use data products.

Federated computational governance.

Decentralized data governance policies

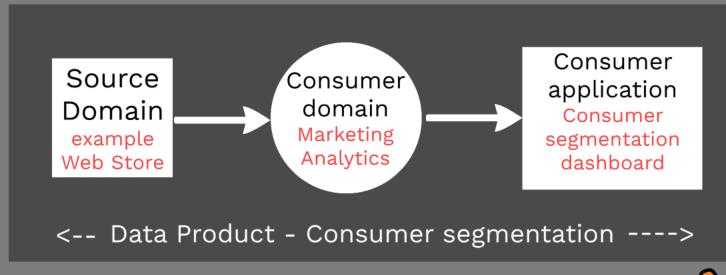
Domain agnostic data platform

Self-service tools

Domain ownership - Data Mesh

After data mesh **Before data mesh** Consumer domain Marketing Analytics Source Domain example Web Store Data **Supply Chain** Data Sources consuming application **Analytics Data Science** Dashboard Team Central Marketing Data Team

Data as a Product - Data Mesh





Data Product Owner

End to End ownership to maintain the value of the data product. Also incentivised to sell this product to other use cases and improve its discoverability.

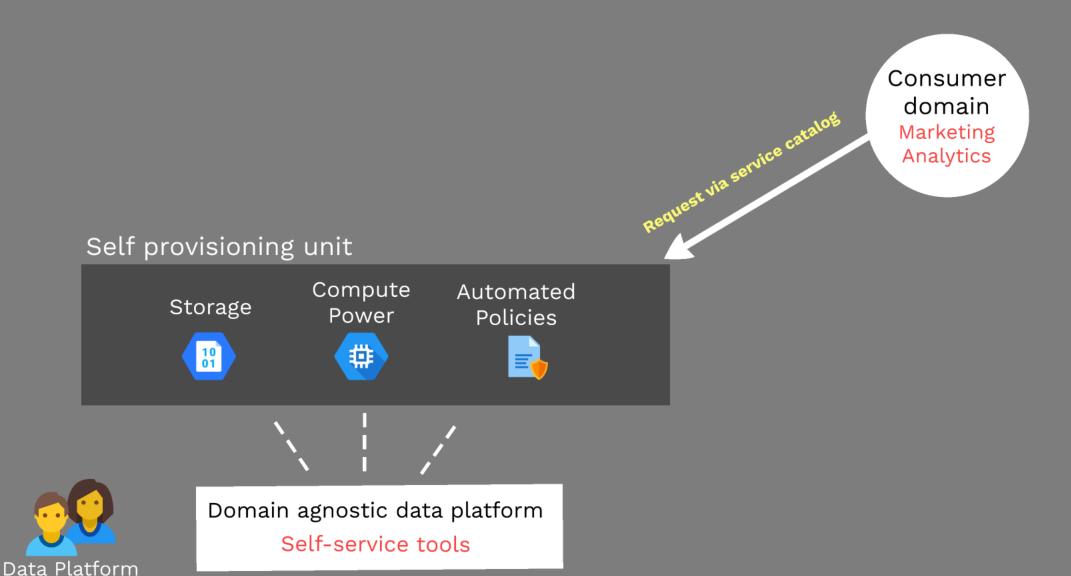


Data Product R&D New products

This product consumes the consumer segmentation data.

Self-serve platform - Data Mesh

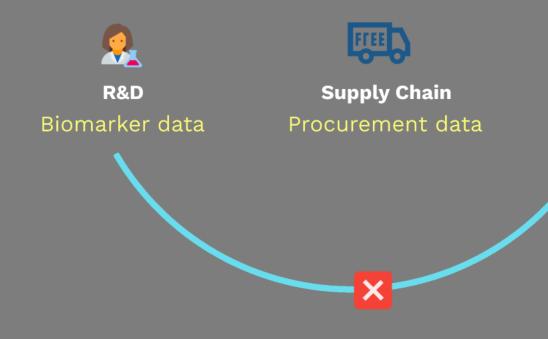
Team



Federated computational governance - Data Mesh

DATASIENS

Automatically enforced data policies using technology.



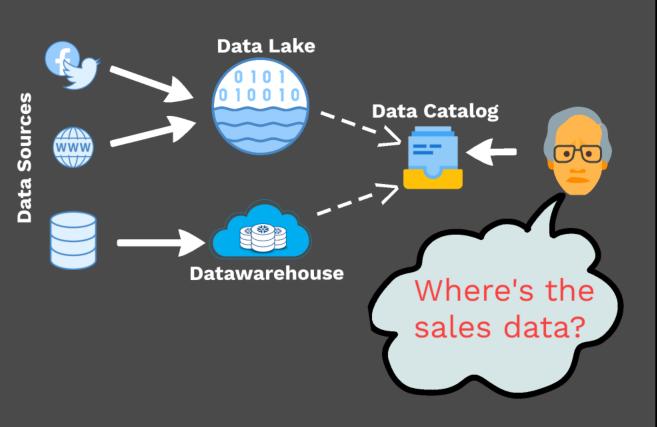


Examples of data policies

No personal data to be used in machine learning projects.

All data products to have **metadata** regarding data product owner, retention and geographical jurisdiction.

Data Catalog



What is a Data Catalog?

One place to Find, Understand and govern data.

Core capabilities of a Data Catalog:-

Data search and discovery: Make it easy to find relavant information within huge volumes of enterprise data.

Curation & governance: Ensure analytics and insights are derived from the best, most trusted data.

Collaboration & analysis: Ensure that data stakeholders aren't working in isolation.