# DATA MESH

OCTO

## THE CHALLENGE

## Delays, Friction, Inability to Deliver Trustworthy Analytics Data at Scale

Faced with an explosive growth in data sources and analytics use cases and an increasingly complex and changing mission landscape, federal agencies are encountering roadblocks and experiencing the limitations of traditional data management approaches as they struggle to ensure trustworthy analytics data that informs mission decisions at the speed of the mission.
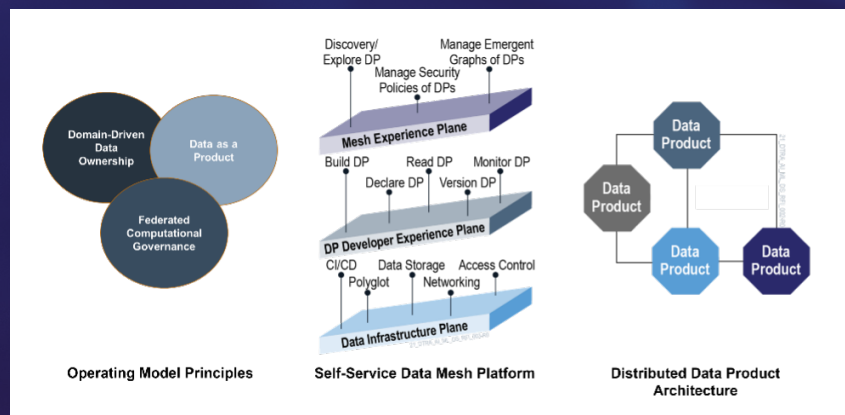
> "
> *We must accelerate getting the necessary data to commanders to inform their decision making."*
>
> **Sr. Army staff member on Digital Transformation**

## THE SOLUTION

## Octo Data Mesh

Federal government organizations can overcome these roadblocks and limitations by embracing data mesh—*a paradigm shift in data management for analytics*—to realize higher value from data at scale, sustain agility in the face of continuous change, and accelerate transformation to data-driven. Octo's data mesh solution provides a new operating model, architecture, and a self-service



**Operating Model Principles** — Domain-Driven Data Ownership, Data as a Product, Federated Computational Governance

**Self-Service Data Mesh Platform** — Mesh Experience Plane: Discovery/Explore DP, Manage Emergent Graphs of DPs, Manage Security Policies of DPs, Build DP, Read DP, Monitor DP, Declare DP, Version DP; DP Developer Experience Plane; Data Infrastructure Plane: CI/CD, Polyglot, Data Storage, Networking, Access Control

**Distributed Data Product Architecture** — Data Product

**Octo offers Self-Service Data Mesh Platform implementations that exploit the power and scalability of AWS cloud native services.**

infrastructure as a data mesh platform that enables cross-functional teams in business domains to serve data from their domains as high-value products created, discovered, and exchanged with data consumers via a robust data product marketplace. *Octo is the industry leader in Data Mesh for federal government organizations!*
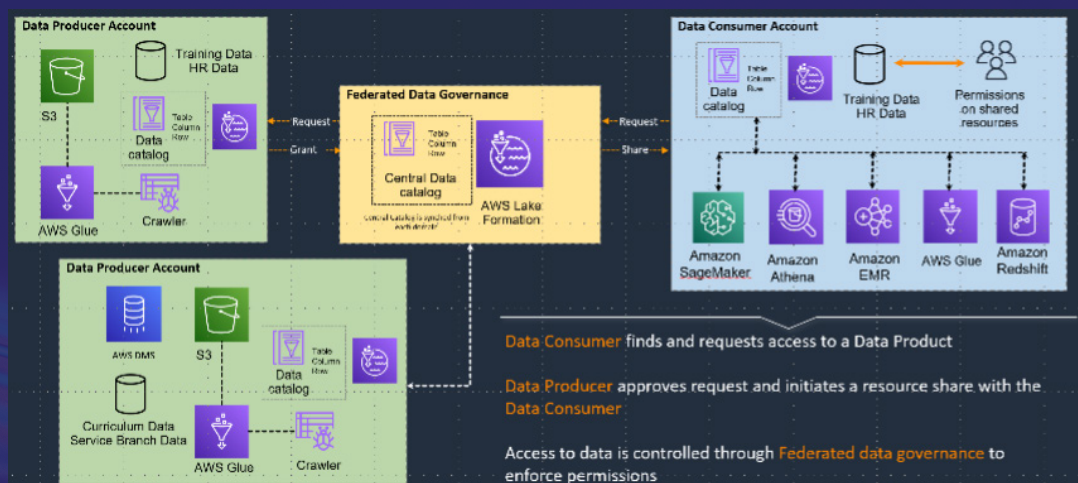
## THE SOLUTION

# Octo Data Mesh (cont.)

The **Self-Service Data Mesh Platform** is a collection of interoperable domain-agnostic services, tools, and APIs that enable cross-functional domain teams to produce and consume data products with autonomy. It supports a robust data product marketplace, getting trustworthy data for analytics use cases into the hands of consumers faster, while also ensuring scalability and security! *AWS offers high value foundational services for robust data mesh platforms:*



**AWS Foundations for Data Mesh Platform**



**Representative Data Mesh Platform Solution Architecture**