**Data Platform Modernization - Accenture Data Mesh Capability**

**Q1. What are the different data mesh services that Accenture provides across various phases?**

Accenture provide services covering all phases of Data Mesh implementation.​ Our Data Mesh services are intertwined with the capabilities required to realize a Data Mesh vision in the organization​.

* Vision and Plan for Data Mesh​
  + Align on Data Mesh Vision and Goals​
    - Align on business objectives and outcomes from Data Mesh​
    - Collaborate on “what” and “how” Data Mesh should be utilized​.
    - Evangelize Data Mesh
  + Understand Current State​
    - Existing data products​
    - BI, analytics use cases​
    - Source systems, DL, DW​
    - Data Governance, Data Management & Operating Model​
  + Plan for the Design Phase​
    - Map to existing projects​
    - Shape new needs​
    - Identify and expand data domains​
    - Detail out the project plan for data Expand the Project plan ​
* Design the Foundation for Data Mesh​
  + Build Self-Service Infrastructure​
    - Platform, tool & vendor selection
    - Build scalable and composable platform X-Ops driven on-demand domain-centric data environment.
  + Instantiate Frameworks & Capabilities​
    - Data Supply chain & lifecycle management​
    - **Key Frameworks**- Orchestration, DQ, Metadata , Security, Data Access & Governance​
    - Develop **Operating Model**​
    - Identify **key assets**for acceleration​
  + Define Data Domains​
    - Identify / enhance data domains and their business entities across business verticals​
    - Align **data product owners**​
    - Build the business information model​
* Establish the Core for Data Mesh Components​
  + Set up Governance structure​
    - Setup **governance office**and **federated data councils** for domains​
    - Assign ownership, stewardship
  + Develop Fit-for-purpose Data Products​
    - Design, test and productionize domain-aligned data products onboarding/cataloguing process​
    - **Physicalize data products**​
    - Apply security, quality frameworks​
    - Apply Knowledge graphs for contextualization​
  + Build Intuitive Marketplace ​
    - Develop **Marketplace** personas and journey map​
    - **Build the marketplace**​
    - Publish data products, onboard data consumers​
    - Enable marketplace functionality ​
* Adopt, Scale & Improve the Mesh​
  + Operationalize​
    - Setup monitoring, observability ​
    - DQ reporting and remediation​
    - Support & Release Management​
    - Operations, Compliance reporting​
    - **Measure business benefits**​
  + Change Management & Adoption​
    - **Change management & Communication**​
    - Engagement and onboarding of  data products and consumers​
    - **Data literacy**​
  + Improve Continuously​
    - **Measure success with key KPIs**​
    - Evolve the Business Information Model and the Glossary​
    - **Engage and scale the adoption of data marketplace**​
    - Enhance X-Ops **automation**​

**Q2. How does Accenture adopt various Data Mesh services at such a large scale?**

Accenture Data Mesh services enables adoption of Data Mesh at Scale​. Accenture Data Mesh Service catalog includes Thought Leadership, Frameworks, Methodologies, Industry standard best practices and proven assets and accelerators​.

* Vision and Plan for Data Mesh​
  + Strategy & Consulting​
    - Data Mesh Scope & Vision
    - Data Mesh Principles
    - Technology Landscape Assessment
    - Process & Governance Assessment
    - Data Mesh OKRs
* Design the Foundation for Data Mesh
  + Strategy & Consulting​
    - Business Engagement
    - Data Mesh Op Model
    - Program Structure
    - Data Mesh Roadmap
  + Architecture & Design​
    - Domain-specific Pilot Executions
    - Data Mesh Architectures
    - Technology Selection
    - Business Case Refinement
    - Mesh Governance Framework
* Establish the Core for Data Mesh Components​
  + Strategy & Consulting​
    - Data Mesh Personas & UX
    - Data Governance Set up
    - Security & Privacy Consulting
  + Architecture & Design​
    - Data Platform Design
    - Data Supply Chain Design
    - Data Management Design
    - Enterprise & Data Architectures
    - Data Handling Control Design (Policies)
  + Implement ​& Scale​
    - Data Platform Build & Productionization
    - Business Information Modelling
* Adopt, Scale & Improve the Mesh​
  + Strategy & Consulting​
    - Change Management & Adoption
    - Mesh Value Measurement & Tracking
  + Implement ​& Scale​
    - Data Protection & Privacy Engineering
    - Advanced Data Analytics
    - Support & Maintenance

**Q3. What are the various Strategies used by Accenture to enable Data Mesh Services?**

Our Data Mesh Strategy services define approach to data mesh enablement​. Our UX-led approach focuses on shaping the client’s Data Mesh vision into attractive UX prototypes within weeks, making it possible to communicate the vision and generate buy-in from internal stakeholders at an early stage.​

Deliverables for Data Mesh Strategy Services​:

* **Data Mesh Vision**: Design-thinking exercise to align on expectations and high-level vision of what the Data Mesh would deliver​.
* **Data Mesh Principles**​: Lead discussion on key top-level design decisions and axioms that would serve as programme guidelines at conceptual and technical levels. ​
* **Data Product Manifesto**​: A collection of ‘Data Product’ definitions, aimed at business stakeholders, technical audience and wider business to embed this key concept​.
* **Data Mesh Personas & UX**​: Detailed profiles and journeys to clearly capture key personas the Data Mesh is being built for. Figma prototypes to bring journeys to life.​
* **Data Mesh OKRs**​: An approach to deploying OKRs to a Data Mesh team, sample templates, suggested objectives​.
* **Business Engagement**​: Develop client-specific incentives pitch for the business. Use UX Figma assets to communicate vision and gain buy in.​
* **Programme Structure**​: Overall Data Mesh delivery org blueprint, programme RACI, business interlock model, decision forums, comms strategy​.
* **Data Mesh Roadmap**​: Rapid Data Mesh readiness assessment, identification of key transformation areas, high level initiatives on a quarterly plan.​
* **Data Mesh Op Model**​: Single view of vision, scope, detailed L1/2/3 capabilities, programme structure and RACI, key new roles and RACI, governance model, performance measurement and delivery plan​.

**Q4. What is the Dual Velocity Approach for Data Mesh Enablement​?**

Proven Dual Velocity Approach for Data Mesh Enablement​. We have observed that Data Mesh value realization can be quickly enabled by dual velocity approach – create the data foundation and deliver the data products to fuel multiple use cases in parallel​.

* Business outcomes & cost efficiencies​
  + Business outcomes​
    - Increased growth​
    - Improved CX​
    - Cost reduction​
    - Self sufficiency​
    - User adoption​
    - Scaled use cases​
  + Cost efficiencies​
    - Reduced legacy costs​
    - Scalable data foundation​
    - Data enrichment​
    - Increased resilience​
    - Advanced security ​
    - Simplified data landscape​
* Data Mesh dual velocity approach​
  + Deliver Business Outcomes: accelerate value by focusing on identifying, prioritising, delivering and scaling data products to fuel multiple use cases
  + Drive Business Adoption: collaborate closely with key stakeholders across business and technology to scale an agile data-driven operating model and optimize execution.
  + Build Enduring Data Analytics & AI Capability: strengthen and scale internal data analytics capability by embracing a ‘product mindset’ to use case development.
  + No Regrets Data: deliver data foundation in parallel to scaling data products or business use cases by prioritising ‘no regrets’ data and key platform components to accelerate value.
  + Data @ Scale: transform and automate critical data elements using a robust data management framework to improve insights quality.
  + Data Enrichment: enrich internal data sets with external data sources to provide deeper insights and identify new opportunities for growth.

**Q5. What are the different assets that accelerates Data Mesh enablement in Accenture?**

Our unique assets accelerate Data Mesh enablement in the organisation. The journey can further be accelerated through our Partnerships and in-house Assets & Accelerators​.

* Vision and Plan for Data Mesh​
  + Data Mesh Reference Architecture & Frameworks​
  + Data Mesh Governance & Operating Model​
  + Data Mesh Assessment & Maturity Framework ​
* Design the Foundation for Data Mesh​
  + myWizard DevXOps​
  + Collibra Data Mesh Quick Start Package​
  + Accenture Unified Data Models (AUDM)​
* Establish the Core for Data Mesh Components​
  + Data Product Engine​
  + Intelligent Data Foundation​
  + Accenture Data Platform Marketplace​
* Adopt, Scale & Improve the Mesh​
  + Intelligent Data Foundation​
  + Data Product Engine​

**Q6. What are the different Data Mesh Accelerators?**

* P0: Vision and Plan​
  + Data Mesh Reference Architecture & Frameworks​ - Thought leadership and blueprint of how mesh can be implemented across technology platforms and data services calling out the various implementation patterns​.
  + Data Mesh Governance & Operating Model - Single view of vision, scope, detailed L1/2/3 capabilities, programme structure and RACI, key new roles and RACI, governance model, performance measurement and delivery plan​
  + Data Mesh Assessment & Maturity Framework - Practical framework for assessing the Mesh Maturity and Readiness in terms of Organization & People, Architecture and Technology.​
* P1: Design the Foundation​
  + myWizard DevXOps​ - Ready to use DevOps platform with OOTB DevOps toolchain, technology specific pipelines as code, baked-in standardization and E2E observability​.
  + Collibra Data Mesh Quick Start Package​ - Quick start package enabling the Data Mesh user journey in Collibra with pre-built asset model, workflows, views and diagrams which can be directly leveraged and scaled​.
  + Accenture Unified Data Models (AUDM)​ - Integrated Model which integrates 12 functional domains common to all industries and 19 functional domains helping reduce time, effort and costs by up to 60% while producing higher quality implementations​.
* P2: Establish the core​
  + Data Product Engine​ - Automated engine to Set up, build and manage your data products across its life cycle​.
  + Intelligent Data Foundation​ - Template-driven zero code approach to govern and scale rapid ingestion, curation and enrichment of data products for both batch and streaming pipelines​.
  + Accenture Data Platform Marketplace​ - Platform enabling publish, Search, filter, rate and share your data products with stakeholders.
* P3: Adopt, scale and improve​
  + Intelligent Data Foundation​ - AI Powered Engine whcih speeds timeline from data ingestion to curation, data quality to scehma matching to provide the required scale and continuously improve​.
  + Data Product Engine​ - Automated engine to Set up, build and manage your data products across its life cycle at scale and at speed​.

**Q7. What are the your experiences on delivering Data Mesh blueprint services​?**

A brief summary of our experience in delivering Data Mesh blueprint services.

* Credential Summary from a large UK based Bank​ that uses P0 and P1 Capabilities - A global bank with an advanced data estate partnered with Accenture to federate data management using Data Mech principles​.
* Credential Summary from a Multinational Bank​​ that uses P0 and P1 Capabilities - A global bank wanted to adopt Data Mesh principles to harmonize their data ecosystem and partnered with Accenture to use UX prototype as Data Mech inhibitor.
* Credential Summary from Roche Diagnostics​ that uses P2 and P3 Capabilities - Accenture partnered with Roche in their Data Platform Modernization journey using Cloud & Data Mesh​.
* Credential Summary from a Large Pharma Retail client​ that uses P1, P2 and P3 Capabilities - Accenture helped in setting up data governance and management capabilities to build data products at scale.
* Credential Summary from a Large UK Telco​ client​ that uses P2 and P3 Capabilities - Accenture helped in building data products and grow a new £250M B2B revenue stream monetizing their data​​.

**Q8. How Accenture helped in shaping Data Mesh strategies and roadmaps for multinational banking and financial services organizations​?**

Shaping Data Mesh strategy and roadmap for multinational banking and financial services organisations

**Client context and challenges​ 1:**

A global bank with an advanced data estate were looking for a partner to federating the way they own and handle data​.

**Accenture approach​:**

* Created a Future Data Strategy following the Data Mesh architecture and principles​
* Designed a Federated Operating model targeting platform architecture and technology enablement roadmap​
* Developed the target Platform architecture empowered by data mesh toolsets​
* Designed Data Mesh Domains and helped in delivery of 1st tranche of Data products​

**Results**:

* Developed Data Mesh adoption roadmap supported by business value case​
* Developed a technology delivery Roadmap in alignment with business case priorities​
* New Operating model provided more clarity around organization, capabilities, interfaces and RACI​
* Created Data Mesh prototype to demonstrate feasibility of the proposed approach​

**Client context and challenges​ 2:**

A global bank wanted to adopt Data Mesh principles to harmonize their data ecosystem​

**Accenture approach​:**

* Introduced Data Mesh thinking by contextualizing standard materials with in-depth business definitions of key concepts
* Built an UX prototype (MVP) to define a Data product incubation approach to further explore multiple data product options
* Helped identify Data Mesh Domains to facilitate assignment of ownership
* Conducted outside-in experience sharing sessions from other clients to demonstrate best practices

**Results**:

* Gathered data mesh requirements and improved stakeholder engagement by through Data Mesh UX prototype
* Aligned key stakeholders to a uniform Data Mesh Vision and Data Product manifesto
* Transformed Data and Analytics Operations through introduction of Data Mesh operating model
* Provided industry benchmarks for Data Mesh value drivers

**Q9. How Accenture partnered with Roche in their Data Platform Modernization journey using Cloud & Data Mesh​?**

**Client context and challenges​:**

* Increased Lead Time ​
* Average ‘Time to Value’ for a product was greater than 4 months ​
* Average Lead time to scale up services was greater than 3 months​
* Reduced Site & System Reliability - 3 Major Incidents (P0s) every year​
* Increasing Operational Cost & Carbon Emission – Increased infra-cost with every new solution requiring addition of a server and thus increasing carbon footprint of the organization.​

**Accenture approach​:**

* Changed ways of working from Project Centric delivery model to a Product Centric approach guided by the Data Mesh paradigm and the Scaled Agile Framework (SAFe)
* Modernized Data Platform through Snowflake Data Cloud as the go to platform and adopted Data Vault 2.0 as the Data Architecture and Modelling framework
* Adopted, Scaled & Improved the Data Mesh via setting up monitoring, observability through Monte Carlo
* Enhanced DevOps automation using DataOps.LIVE
* Evolved the Business Information Model and the Glossary using Collibra
* Achieved higher customer satisfaction and increased site reliability by completing a deep-Dive analysis of the as-is Business Intelligence Architecture and Infrastructure
* Identified the bottlenecks which led to increase in lead time w.r.t scalability and time-to-market, reduction in site reliability index and increase in cost and carbon emission.

**Results**:

* 84% Reduction - Time to market​
* 4.75 / 5.00 - Customer Satisfaction ​
* Zero – Number of Major Incidents / Outages​
* 75% Reduction - Time to deploy Hotfix​
* 19+ Products Launched - All live without any major issues​

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**Technology Used**:

* DataOps
* Snowflakes
* Collibra
* Talend
* Qlik
* Tableau
* Monte Carlo

**Q10. How Accenture enabled cloud and data governance on cloud for a Pharma Retail client​​?**

**Client context and challenges​:**

A global pharma chain with 2.5 PetaByte (PB) of data sitting in Hadoop and Teradata and  20 PB of data on Oracle and SAP​

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**The Challenge:**​

* Disintegrated and redundant data in siloes across platforms​
* Exponential YoY data growth and the inability of the platform to handle the same​
* 10-15% increase in annualized costs of storage and compute​
* Slow time to market​
* Limited IT support for existing data sources​

**Accenture approach​:**

* Accenture partnered with the client to develop a Modern Data Platform on Azure cloud, set up business metadata cataloging and active Data Quality capabilities​
* Created a domain-based governance structure and encapsulated the data with right data security and privacy controls​
* Built data products by domains and democratized them through the marketplace​
* Enabled business with self-service data science workbench and BI reporting ​

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**Results**:

* Domain based consumption enablement
* Removed Siloes -> 100% centralized and optimized data
* Enabled self-service capability for business there by reducing time to market
* 50% rationalization of reports and feeds
* Enabled business use cases:
* Identified customers yielding maximum revenue in terms of their retail spend distribution
* Labor spend analytics across their headquarters, Delivery Centers & Stores

**Technology Used**:

* Azure Data Bricks
* Snowflakes
* Collibra
* Power BI

**Q11. How Accenture helped a Large UK Telco to grow a new £250M B2B revenue stream monetizing their data​​​?**

**Client context and challenges​:**

A British mass media and telecommunications company based in London, England with a customer base of ~50 million across broadband, mobile, TV and home phone

**The Challenge:**

* Create a new B2B solution to monetize the mobile data insights
* To comply with privacy regulations
* Provide easy access to external interface that can link into existing media planning tools

**Accenture approach​:**

* Accenture partnered with the client to develop a telco data monetization platform that would allow them to turn their anonymized & aggregated data on movement, profiles and preferences generated by 35% of the UK’s population from billions of daily network events
* Spatial insights for a range of sectors including cities & government, tourism, media agencies, retail and mobility
* Using this platform, client has been able to grow a new b2b revenue stream
* Additionally providing greater value to their largest enterprise clients

**Use Cases Addressed:​**

* Human Mobility​
* Spatial Intelligence​
* Points of Interest

**Results**:

* £25m revenue realized with 4 Customers on boarded​
* Ability to quickly onboard new use cases / customers​
* ​£100M active customer​
* £250M potential revenue from data monetization​

**Technology Used**:

* Spark
* Kafka
* Azure
* Python
* Attunity
* Hadoop