

Mphasis Capability in DataOps Implementation

Mphasis delivers end-to-end DataOps implementation services that unify development, data engineering, testing, quality automation, and operations into a single continuous delivery model for modern data platforms. This helps enterprises achieve Better Data Faster with high reliability, governance, and automation.

DataOps at Mphasis is implemented across Snowflake, Databricks, AWS, Azure, GCP, and hybrid data ecosystems, supported by accelerators such as MDCert, MeETL, PolyJuice, MD-Gen, and dbt-based automation frameworks.

What Mphasis Provides in DataOps Implementation

1. Enterprise DataOps Framework & Operating Model

Grounded in DevOps principles, Mphasis DataOps integrates:

- Continuous integration & deployment for data pipelines
- Automated testing & data quality monitoring
- Version-controlled modular SQL development (dbt, Git)
- Automated environment orchestration

2. Data Pipeline Automation & Engineering

Mphasis enables fast development of ingestion, transformation, and curation pipelines using:

- Unified Lakehouse patterns (Snowflake, Databricks Delta)
- Modular SQL development via dbt
- Reusable engineering patterns for Spark, Python, cloud ETLs

3. Data Quality, Testing & Observability Automation

Automated QE frameworks integrate with CI/CD:

- Continuous data validation (MDCert)
- Automated unit tests, schema tests, anomaly detection
- Real-time pipeline reliability monitoring

4. Governance-Enabled DataOps

DataOps is fused with data governance to ensure:

- Standardized metadata, lineage, and catalog integration
- Role-based security
- Compliance for regulated industries (Banking, Healthcare)

5. Cross-Cloud Expertise & Deployment at Scale

Mphasis brings a strong DataOps foundation with:

- 9500+ data practitioners supporting DataOps, MLOps, DevOps
- Multi-cloud delivery expertise (AWS, Azure, GCP)

- Snowflake & Databricks Centers of Excellence

6. DataOps Training, Coaching & Organizational Adoption

Several enterprise clients achieved 100% self-sustaining DataOps maturity through:

- Squad-level DataOps training
- Playbooks, reusable templates, and spec-driven development

Key Features of Mphasis DataOps Implementation

✓ Continuous Integration & Continuous Deployment for Data (CI/CD)

Automated model builds, pipeline tests, and artifact promotion.

✓ Automated Data Quality Gates

Integrated into orchestration workflows to ensure only “certified data” flows downstream.

✓ Version-Controlled, Modular Development

dbt-led SQL models, Git-based repositories, dependency graphs, and change traceability.

✓ Cloud-Native Engineering Patterns

Reusable patterns for ingestion (batch/streaming), transformation, and data sharing.

✓ End-to-End Orchestration

Automated environment provisioning, pipeline scheduling, and lineage generation.

✓ Integrated DataOps + MLOps

Unified pipelines for data prep, model training, deployment, and monitoring.

Business Benefits of Mphasis DataOps Implementation

1. Accelerated Time-to-Data & Faster Releases

DataOps reduces cycle time through automation, modular development, and continuous deployment—delivering Better Data Faster.

2. Higher Data Reliability & Trust

Automated testing + MDCert ensures consistent quality across all data pipelines.

3. Reduced Operational Costs

Automation, optimized pipelines, and cloud-native patterns reduce infra cost, run-time inefficiencies, and manual checks.

4. Scalable, Governance-Ready Architecture

Supports data democratization with secure, governed access for all business domains.

5. Faster Innovation via Self-Service Data Capabilities

Teams gain the ability to build, test, and deploy data products independently using standardized templates and automated workflows.

6. End-to-End Observability & Proactive Issue Detection

Ensures pipeline reliability and reduces MTTR (Mean Time to Restore).

GLOBAL FINANCIAL INSTITUTION



Presentation title

Challenges in Data Management

The institution faced complex pipeline management, slow deployments, and governance challenges across Snowflake and Databricks.

DataOps Framework Implementation

Implemented CI/CD, Git version control, dbt modular SQL, and MDCert automated validation for improved workflows.

Enhanced Monitoring and Auditability

Incorporated dependency graphs, lineage tracking, proactive monitoring, and alerting to minimize downtime and ensure compliance.

Impact and Benefits

Achieved 40–60% faster release cycles, improved regulatory compliance, and increased trust in data quality.

ENERGY & UTILITIES PROVIDER



Presentation title

Modern Data Ecosystem

The provider modernized its data ecosystem to support growing IoT and operational datasets for real-time analytics.

Automated DataOps Solution

Snowflake-based DataOps automated ingestion, transformation, and curation, enhancing data product deployment speed.

Governance and Compliance

Governance was enhanced via metadata management and role-based access controls for secure data usage.

Business Agility and Efficiency

Business teams gained independence to build and deploy data products, improving operational efficiency and agility.

HEALTHCARE ORGANIZATION



Presentation title

DataOps Implementation

Adoption of a DataOps model with Test-Driven Development and automated validation improved data reliability and process speed.

Governance and Compliance

Lineage tracking and metadata cataloging ensured transparency and adherence to healthcare regulations.

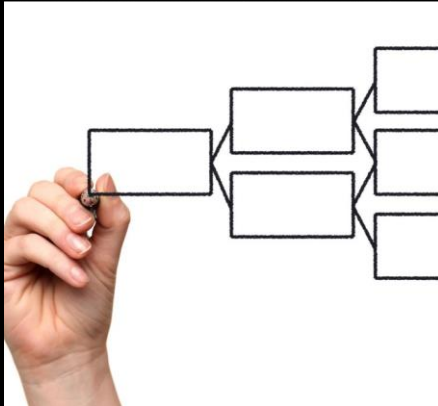
Operational Improvements

Faster regulatory reporting and reduced operational overhead enhanced trust in analytics and patient care decisions.

Future-Ready Analytics

The platform supports advanced analytics and AI-driven initiatives to improve patient outcomes.

TELECOM - TALEND TO DATAOPS.LIVE MIGRATION



Presentation title

Migration to Modern DataOps

The telecom operator migrated from Talend ETL to DataOps.live to simplify operations and improve release reliability.

Automation and Testing

Integration of CI/CD pipelines enabled automated deployment, testing, and regression checks for zero-defect releases.

Enhanced Observability

Real-time monitoring dashboards improved observability and reduced mean time to restore after failures.

Cost Efficiency and Agility

The transformation reduced manual effort, cut costs, accelerated time-to-market, and improved governance.

BANKING SECTOR - REAL - TIME DATA INTEGRATION



Presentation title

Real-Time Data Ingestion

Streaming ingestion patterns enabled near real-time processing to meet strict regulatory and operational demands.

Automated Quality and Validation

Automated data quality gates and continuous validation ensured data accuracy and completeness across environments.

Proactive Monitoring and Alerts

Continuous monitoring and alerting maintained pipeline reliability and prevented data disruptions.

Cloud-Native DataOps Implementation

Cloud-native services and reusable engineering patterns enabled zero-defect releases and faster regulatory data availability.

Further Information: For more information about our G-Cloud services, please contact our Public Sector Team at mphasisukps@mphasis.com

