Partnership with a large biotech company on their lakehouse initiative for clinical data

Client
A leading biotechnology company specializing in pharmaceuticals and diagnostics

Company Size
100,000+ employees

Location
Global

Featured Partners

databricks

The client sought a strategic partnership to accelerate drug development, reduce risks in their clinical pipeline, and strengthen their global leadership in personalized medicine.

By implementing a robust and scalable data platform, the solution optimized the client's DataOps landscape, enhanced data processing and analytics capabilities, and significantly improved decision-making processes.

- Secure Platform Development
- Advanced Data Analytics Integration
- Data Strategy
- ETL Migration & Optimization

The Challenge: Streamlining data operations and enhancing analytics capabilities

Objective: Accelerate drug development and strengthen global leadership in personalized medicine.

Existing Issues: Fragmented data operations and limited analytics capabilities hampered efficient drug development.

Solution Needed: A scalable, integrated data platform with advanced analytics and governance.

Outcome: Enhanced decision-making and operational efficiency, which reduced time-to-market and improved trust in their data.

The client faced challenges in streamlining their data operations and enhancing their analytics capabilities to support faster drug development and personalized medicine. They needed a scalable and robust data platform to mitigate risks in their clinical pipeline and maintain their leadership in the industry.

The Solution: A comprehensive, secure, and GxP-validated data platform

The solution involved implementing a comprehensive data strategy and developing a secure, GxP-validated platform with advanced data integration tools. This approach enabled the client to optimize their DataOps landscape, enhance their analytics capabilities, and foster a data-driven culture. Below is an outline of the multi-phased approach and relevant workstreams:

Phase 1: Data Strategy Assessment

Our team conducted a thorough assessment of the current data landscape to identify gaps and collaboratively plan a future-state strategy.

Workstreams:

- Current-state assessment
- Technology gap analysis
- Future-state planning

Phase 2: Platform Development

We developed a secure, GxP-validated platform with integrated data tools to enhance business value and support DataOps capabilities.

Workstreams:

- Secure, DataOps-capable platform creation
- Data integration tools implementation
- GxP validation

Phase 3: Data Architecture & Governance

To enable efficient data sharing and advanced analytics, we established a robust data architecture with governance frameworks, role-based access control (RBAC), and regulatory compliance.

Workstreams:

- Governance framework setup
- RBAC implementation
- Regulatory compliance

Phase 4: ETL Migration & Optimization

Our team migrated ETL processes to a new platform that enhanced data ingestion. This fostered a culture of data-driven decision-making through domain-driven data products and federated governance.

Workstreams:

- Self-service data ingestion
- Domain-driven data products creation
- Federated governance

Services and Technologies Used:

Services:

- Data Strategy and Planning
- GxP-Validated Platform Development
- Data Integration and ETL Optimization
- Data Governance and Compliance
- Advanced Analytics Implementation
- Self-Service Data Ingestion Tools
- Domain-Driven Data Product Development

Technologies:

- Databricks
- AWS
- Collibra
- FiveTran
- Spotfire

The Results: Impact on the client organization

The project resulted in significant improvements for the client, including a 20% faster clinical development process and a 30% reduction in time spent manually processing data. The enhanced data governance and advanced analytics capabilities also contributed to a 15% faster time-to-market and a 40% increase in data quality.

Accelerated Development: Effective decision intelligence led to 20% faster clinical development.

Operational Efficiency: Automation produced a 30% reduction in time spent manually processing data.

Faster Time-to-Market: This initiative resulted in a 15% quicker time-to-market with 10% lower total cost of ownership.

Enhanced Data Quality: With improved governance, the client saw a 40% increase in data quality and regulatory compliance.

Improved Decision-Making: This work led to 25% faster clinical decision-making and improved accuracy.