How a nonprofit organization modernizes their data with a centralized data warehouse

Client

A national nonprofit organization in the public education sector

Location

United States

Featured Partners



A national nonprofit organization needed a modernized approach to data management to support their mission-driven work across multiple service areas. Their legacy systems and siloed data practices hindered visibility, slowed decision-making, and posed a risk to data integrity. They partnered with Marlabs to build a centralized data warehouse that would improve operational efficiency, promote data governance, and enable long-term scalability.

Through a structured, collaborative process, Marlabs helped the organization migrate critical data from legacy systems into a single cloud-based environment with reliable reporting and analytics capabilities. The result was a modern data infrastructure that provided leadership with real-time insights and enhanced the organization's ability to serve its constituents.





Cloud Data Architecture



Data Warehouse Modernization



Analytics & Reporting



The Challenge: Tackling fragmented data systems in

a mission-driven environment



Objective: Build a centralized data warehouse to streamline reporting and enable future scalability.



Existing Issues: Legacy systems were causing siloed data, inconsistent reporting, and inefficiencies across departments.



Solution Needed: A modern, cloud-based data architecture with strong data governance and integrated reporting.



Outcome: Marlabs delivered a scalable data warehouse that improved visibility, reporting accuracy, and executive decision-making.



The organization operated with multiple disconnected systems, making it difficult to access and analyze critical information needed for strategic planning and reporting. They needed a centralized data warehouse to unify the data pipeline and create trustworthy data and reports.

The Solution: Building a scalable & governed data infrastructure

Marlabs implemented a comprehensive solution that combined strategic planning with technical execution. The approach ensured that the organization's new data warehouse aligned with long-term goals, regulatory needs, and operational realities. The phased methodology provided incremental wins while laying the foundation for sustained value and scalability.

Phase 1: Stakeholder Discovery & Alignment

Marlabs met with organizational leaders to understand goals, define needs, and establish a data strategy.

Workstreams:

- Stakeholder engagement
- Needs identification
- Vision alignment
- Roadmap development

Phase 2: Architecture Design & Cloud Migration

The team designed a scalable, cloud-based architecture and migrated key data assets into the new environment.

Workstreams:

- Cloud environment setup
- Data modeling
- Data migration
- Architecture validation

Phase 3: Data Governance & Integration

We embedded governance practices into the design, and we integrated multiple legacy systems for unified access.

Workstreams:

- Governance framework
- Data integration
- Source mapping
- Policy definition

Phase 4: Enablement & Reporting Delivery

Finally, our team built selfservice dashboards and reports to enable fast access to insights. We also provided training for more effective adoption.

Workstreams:

- Dashboard development
- Report delivery
- User enablement
- Knowledge transfer

Services and Technologies Used:

Services:

- Data
- Data Architecture and Engineering
- Data Warehousing
- · Data Migration
- Data Integration
- Data Strategy
- Data Management
- Business Intelligence (BI)
- Data Governance
- Data Visualization

Technologies:

- Fivetran
- Snowflake

The Results: Impact on the client organization

The nonprofit organization emerged from the project with a trusted, centralized data platform that supports strategic growth. The scalable cloud solution improved leadership visibility, enabled self-service capabilities, and fostered a stronger data culture across departments. Through training and governance planning, the organization is now equipped to maintain and evolve its data environment over time.



Streamlined Reporting Processes: Reports that once took hours to compile can now be generated in minutes.



Enhanced Strategic Planning: Leadership can make data-driven decisions with greater speed and confidence.



Centralized Data Access: Users access a single source of truth, which reduces confusion and duplication.



Scalable, Future-Ready Architecture: The new platform supports future integrations and growth without significant rework.



Increased Operational Efficiency: Departments gained quicker access to relevant data, allowing them to reduce bottlenecks.



Reduced Security and Compliance Risks: Data governance provides clearly defined roles and processes that strengthen compliance and accountability.