

Modern Data Platform for Better Member Health Outcomes

Client Overview

A predominant health payer in the northeast, USA, with a century-old legacy, serves around 60% of the state population with an array of health plans and offerings, focusing on a myriad of health services from prenatal care to lifestyle improvement programs.

Challenges

The client's extensive and distributed information assets, spanning from legacy mainframes to traditional warehouses, posed significant hurdles in achieving effective data-driven decision support, leading to decreased competitiveness and presented several opportunities for improved efficiencies. The core challenges involved:

- Inflexible and diverse source structures.
- Information Silos leading to decreased insights.
- Performance bottlenecks and accumulated technology debt.
- Inefficiencies in data governance.
- Lack of effective means to unify, leverage data and prepare for analytics..

Business Objective

To augment health, care and wellness for all its members by facilitating financial protection through affordable health insurance products and enhanced data-driven decision support.

Solution

ValueMomentum, chosen for its extensive expertise in modern data platforms, spearheaded the project by implementing a cloud-native intelligent data platform, divided into multifarious workstreams like ingestion, distribution, MDM, and data operations. The solution emphasized agile methodology, global delivery models, and involved:

- In-depth source data discovery and analysis.
- Agile approach in delivering successful data load into the secure data lake.
- Designing and building robust data ingestion pipelines and data orchestration.
- Creation of a unified, authentic enterprise-level repository.



Technology Stack

- AWS S3, Athena, AWS Glue
- Jupyter Notebooks, client tools

Value Delivered

The implementation of modern data platform enabled transformative analytics, resulting in:

- 10x faster analytics leverage across various data sources.
- 95% rate of data unification and the sunset of overlapping pipelines and marts.
- Accelerated analytics enablement and optimal data storage costs.
- Resolution of primary business drivers/challenges through unified data lake and increased insights.
- Enhanced governance, faster, and more accurate outcomes.

Business Impact

The modernization drove 5x efficiency gains across business areas, reinforcing the client's outreach and claims processing, allowing an enhanced ability to perform analytics over diverse data sets. This approach has not only boosted the client's market competitiveness but also facilitated better, informed, and data-driven decisions, optimizing overall business operations.

Conclusion

This data transformation journey emphasizes the pivotal role of modern data platforms in reshaping healthcare payers' approach to data analytics, unifying disparate data sources, and fostering an environment conducive to informed decision-making and operational efficiency.