Building a Scalable Data Platform with Snowflake

omeda

Company Overview

Omeda is partnering with 7Rivers to design a Snowflake-based data warehouse and data science platform. The project aims to improve Omeda's analytics capabilities, optimize data management, and transition from SQL Server to a cloud-based environment that offers scalability, flexibility, and real-time insights.

Challenges

- Omeda's SQL Server infrastructure limits scalability, performance, and flexibility, hindering growth and innovation.
- Managing customer data workloads and delivering enhanced analytics are difficult wit the current architecture.

7Rivers

Designed and tested new data models to measure Snowflake's performance improvements, comparing it against SQL Server to ensure better scalability, enhanced analytics capabilities, and cost-efficiency for long-term adoption.

Conducted a detailed Proof of Concept (PoC) focused on validating Snowflake's capabilities for cloud-based data warehousing, testing its performance under production-like conditions to guarantee readiness for full-scale deployment.

Developed and implemented a seamless migration framework using Airbyte for real-time data replication, ensuring minimal downtime during migration from SQL Server and laying the foundation for Omeda's future cloud infrastructure modernization.

Opportunities

- Transitioning to Snowflake's scalable, cloud-based platform can enhance real-time data management and analytics.
- Using AI/GenAI tools through Snowflake opens opportunities to explore advanced analytics capabilities.
- Data replication via Airbyte allows seamless migration from SQL Server, minimizing operational disruptions.

Solution

- Snowflake's Data Science Workbench is leveraged to enable scalable data management and advanced reporting.
- Airbyte is used to replicate data, ensuring smooth data migration from SQL Server to the Snowflake environment.
- A refined data model and pipelines are integrated to support Omeda's analytics and AI objectives.