Cloud & Data Modernization

Leaders in innovating the development of financial engagement technology platforms, building dynamic customer facing conversation guides for financial institutions. This company has experienced tremendous growth, so much so that their custom analytical application was no longer able to perform well considering the volume and velocity of the data flow. Some of the main challenges faced:

> Difficulty updating code fixes or enhancements that matched the real-time needs of customers.

> Performance resolution issues.

> Poor error-handling system leading to unresolved bugs.

> Difficulty onboarding new clients due to limited capacity.

Our Solution

Developed a detailed assessment report through deducing the current state of the architecture, and analyzing business use cases, to provide personalized technology options and pricing.

Provided a comprehensive plan with fail safes to move BI and Analytical implementation to the cloud through a cloud native application.

Improved mongoDB architecture to handle increased and quickly expanding traffic, providing short term and long term strategies to improve performance.

Flattened existing MongoDB data to build a

consistent, high quality data model in Snowflake. Utilized Fivetran to Build pipelines in real-time that centralize and replicate the data from MongoDB to Snowflake, increasing reliability and consistency of the data quality.

Replicated existing dashboards into Quicksight by building UI wireframes and story boards to facilitate transition and adoption.

Implemented Row Level security (RLS) to control user access for certain reports and dashboards.

Implemented IAM user access for permissions in Snowflake DW and QuickSight.

Results

> DataFactZ was successful in migrating the DW from MongoDB to Snowflake. A data model was created that satisfies current and future analytical needs showcasing the efficiency of cloud native applications.

> Through Snowflake a highly scalable, single source enterprise data warehouse was created and designed to grow with their business.

Technologies

> Amazon AWS, Snowflake, Fivetran, Mongodb, Amazon Quicksight, Amazon SageMaker

Increased availability and accessibility of data and information by	Faster near real time data processing with	Reduced maintenance time by	Increased resource availability by bringing down memory consumption by more than
300%	**15 min** Latency	**500%**	**70%**