

Implementing a Customer Data Lake to Enable Advanced Analytics

Case Study | Data Engineering

TOP-5 US INSURANCE COMPANY

THE PROBLEM

The customer had recently streamlined their MDM system and wanted to augment their data management capabilities to facilitate advanced analytics.

Their data management architecture has MDM data going into an Enterprise Data Warehouse along with data from other transactional systems. On this data, traditional BI reports are being generated.

The ecosystem is still disconnected and does not open up for data management challenges of today and the future, limiting the team from deriving more meaningful insights.

THE SOLUTION

We implemented a customer Big Data lake in Cloud, as that was chosen as the right strategy to augment the client's data systems to enable advanced analytics.

As part of the POC, a Customer Intelligence platform was built to showcase the potential to derive analytical conclusions of two use cases: a) Correlate digital interactions to service requests to identify potential enhancements in digital interactions, and b) Understand cross-sell quoting vs. buying patterns between clusters of customer households (by segment, CLTV, LOB mix, etc.) in order to inform next-best-offer plans.

After successful completion of the POC, a foundational Customer Data Lake was built as part of Phase I. 15 sources were loaded into the data lake and synthesized to Customer Data, forming a true customer 360 view of master data, tied to various transactional systems.

THE OUTCOME

At the client's request, their data management architecture is augmented with a customer Data Lake.

Seeing the success of Phase I, another business unit (Personal Lines Billing) stepped up to load their data into the Data Lake and connect it to customer data.

The customer Data Lake became an integral part of a nationwide data mining competition conducted by the client every year.

Three advanced analytics use cases are being activated on the customer Data Lake in 2019, and one of the three is to fulfill the CEO's strategic objectives for the year.