Case Study

Recommendations for a Large-Scale Data Analytics Hub
to Enable Customer Analytics →

Client Context

A leading U.S. banking and financial services firm was undergoing a merger and integration with its parent company. This involved the challenge of seamless integration of hundreds of thousands of data points to reduce costs and provide unified insights, all in a secure, optimized, and compliant environment.

The Challenge

The financial firm found itself facing several significant issues:

Redundant systems

The merger with the parent company introduced redundant systems, leading to a higher degree of complexity and creating both process and data confusion.

Lack of integrated and standardized IT systems

The firm's existing ecosystem consisted of multiple staggered data source systems and lacked a well-curated semantic and analytics data layer. This hindered the crucial customer analytics capabilities needed for a competitive advantage. Further, system integrations did not guarantee delivery of all records in a consistent and timely manner (e.g., transactions were 2+ days old), further exacerbating analytics and reliability issues.

Inadequate cloud migration strategy

The client wanted to seamlessly migrate to the cloud, ensure data governance, and enable management and corporate analytics reporting. A thorough data strategy was required to resolve key operational and reporting challenges to set the foundation for AI/ML analytics use cases such as cross-selling, customer retention offers, new customer acquisitions, and more.

Tredence Solution

Tredence enabled the modernization of workloads by evaluating and recommending a Data Integration Hub (DIH) and proposing various design options to build a robust, scalable Data Analytics Hub (DAH). Next, we used our Data Quality Management (SANCUS) accelerator, an AI/ML-based data quality management tool that helps businesses establish standardized data processes, delivering reliable data to the company.

An Enterprise Data Model was deployed across the integration architecture and the Data Analytics Hub drove standardization of KPIs, hassle-free onboarding of new data sources, and activation of cross-functional use cases, ensuring it becomes the one-stop shop to serve all of the client's data and analytical needs.

The Approach

Tredence recommended customized data handling for the client organization's transactional and analytical needs, ensuring efficiency and scale for management reporting and customer experiences. Additionally, we customized and executed the Sancus AI/ML model using Azure Databricks, tailoring it to the specifics of each customer transaction. Lastly, we consolidated KPIs combined with the Modern Analytics Framework to enable additional insights, ensuring improved customer retention, targeted and successful marketing campaigns, and seamless omnichannel banking customer experiences.

Business Impact

High adoption

Within the first four months, over 600 datasets were consolidated, resulting in 100% adoption of data models. This resulted in the scale-up of customer experience use cases, offering recommended cross-sell opportunities to business units.

Efficiency gains

Migrating to the modern cloud infrastructure facilitated the processing of over 100 TBs of data within minutes.

Improved data quality

The client used our data accelerator and achieved a 20+% improvement in data quality.

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