XTIVIA

HEALTHCARE INSURANCE SAAS DATA WAREHOUSE

ORGANIZATION

Our client is a top health insurance provider in a central metropolitan area in the Midwest United States. It covers 32 counties in two Midwest States and offers 40 health insurance plans for individuals, families, and employers. The client had a data warehouse built on a platform used for reporting and ad hoc analysis needs. The process of updating the data warehouse involved collecting patient and insurance data from different subject areas, sending data to a third party for grouper processing, and updating the warehouse with the output coming from the grouper processing.

CHALLENGE

The legacy data warehouse platform could not support the growing ad hoc and data mining needs, and they did not have an automated ETL process to consolidate all the required data for grouper processing. Our client envisioned an analytics (OLAP) platform allowing partner access in an SaaS model. The current data warehouse platform would not be able to scale to future business needs. In addition to this, the objective was to save costs by reducing dependency on third-party grouper processing vendors. This was proposed by buying a grouper product and fully integrating it with the SaaS data warehouse platform to be used by prospective clients.
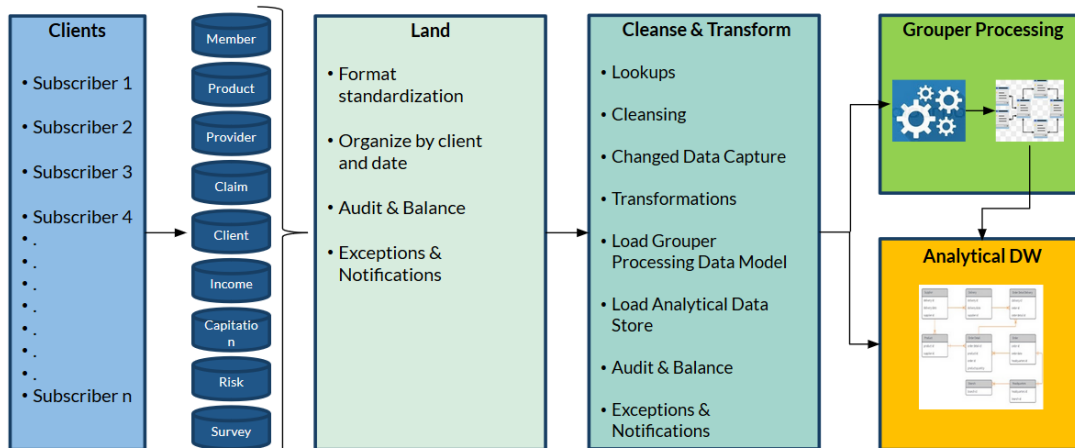
BY THE NUMBERS:

80+ Years in Business

40+ Health Insurance Plans

1 Million Members

KEYWORDS

SaaS Data Warehouse, Teradata Data Warehouse, Healthcare Data Warehouse, Data Modeling, Teradata ETL, Layered ETL Architecture

SOFTWARE

Teradata | Teradata Load/Unload Utilities | Teradata Viewpoint | Linux Shell Scripting | CA Erwin

teradata.

SOLUTION

XTIVIA proposed a solution that entails selecting and deploying enterprise-class data warehouse platforms, creating the logical and physical data models, integrating industry-standard healthcare groupers and custom methodologies, and report dashboards visualizations. The proposed solution would position the company towards a retail-based business model to survive and thrive through the expected 2013 healthcare reform mandates.

As part of the pre-establish phase, XTIVIA analyzed the business problem, storage needs, processing needs, and recommended Teradata Data Warehouse Appliance 2650 for hosting the Analytics Data Warehouse. The ETL solution entails extracting data from different insurance subject area sources to the landing area where the data goes through necessary sanity checks. Data from the landing area was loaded to the staging area where the data cleansing and changed data capture were performed, surrogate keys were generated, and transformations were applied before loading the data into Grouper and the Enterprise Analytics Data Warehouse.

Highlights of the solution are the usage of Teradata utilities for ETL processing, changed data capture processing, surrogate key generation, ETL Audit-Balance-Control, and Row-level security multi-tenancy.

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SOLUTION (CONTINUED)

The data warehouse includes entities and attributes required for grouper processing. The data was sent to grouper processing, and the enriched data from grouper processing was loaded to the Enterprise Analytics Data Warehouse. The ETL processes were fully automated and scheduled on the Linux environment to run monthly. The solution also includes a flexible and secure data model to allow SaaS clients. The ETL process includes a restart capability and audit logs. Teradata Viewpoint was used for monitoring the database activities and alerting different events related to resource usage.

BUSINESS RESULT

XTIVIA's solution for our client allowed them to hurdle every barrier in their SaaS and data warehouse environments. With the new infrastructure in place, the client was able to enjoy the following benefits:

- Scalable data warehouse and analytics platform.
- A centralized analytics platform for our client and its partners (prospective SaaS tenants).
- A flexible and secure data model for multi-tenancy.
- Cost savings and improved efficiency due to reduced dependence on third-party vendors for grouper processing.
- Additional revenues to our client with each tenant signing up for access.
- A single platform enabling the sharing of best practices between partners.

XTIVIA OVERVIEW

XTIVIA is a proven technology integration and innovation company known for delivering leading-edge technology solutions to our clients' specific requirements, regardless of project complexity. We bring next-level business operations to reality through Application Development, Business Intelligence, Data Warehousing, Database Support & Management, Enterprise Information Management, Digital Experience Solutions and Enterprise Resource Planning. Our success stems from a demonstrated ability to deliver deep expertise via professional services, empowering clients to leverage their chosen technology successfully, competitively and profitably. XTIVIA has offices in Colorado, New York, New Jersey, Missouri, Texas, Virginia, and India. www.xtivia.com