DATA ENGINEERING SUPPORT FOR RETAIL APPAREL COMPANY

ORGANIZATION

Our client is a well-recognized retail apparel chain headquartered in Texas and operating 1,500+ stores in the US and Canada. The company has acquired many big market players as its subsidiaries. They offer men's and women's clothing, footwear, tuxedo rentals, and suit pressing with quality, fashion, and innovation as a central part of each product. The company has many warehouse facilities with a reliable supply chain mechanism. Globally, around 22,500 employees are providing high-touch, high-quality shopping experience across their brands.

CHALLENGE

Our client has an Enterprise Data Warehouse (first on Teradata, which was migrated to Snowflake in 2019-20) and departmental reporting data marts on Hyperion Essbase and MicroStrategy. The technology landscape included other tools such as DataStage, Python, UC4, MySQL, and Oracle. The data pipeline needs to be closely monitored as some critical high-visibility reports need to be available for end-users every day. There are ongoing enhancements and fixes to the data warehouse (adding new aggregate tables, developing new ETL jobs, fixing production issues by fixing code and/or data, providing data to Data Scientists, etc.).

BY THE NUMBERS:

1,500+ North American Store

65+ Million eCommerce Site Visits

37+ Million Loyalty Customers

KEYWORDS

Data Engineering, Business Intelligence, Data Warehousing, Data Warehouse Migration, Data Migration, Data Integration, OLAP

SOFTWARE

Snowflake | Teradata | Python | SUSE Linux | InfoSphere DataStage | Eclipse| UC4

The daily ETL jobs start at 12 AM and end at 5:30 AM. Our client wanted to have the data pipeline supported by high efficiency and L1, L2, and L3 support ownership. This support requires high levels of coordination among different teams (Production Operations, ETL/DW Support Team, DBAs, and other Infrastructure teams).

SOLUTION

The timing and critical nature of the daily data pipeline required expertise and experience in providing Data Engineering and Data Warehouse support. XTIVIA was the natural choice for this support due to our close involvement in implementing all the client's ETL pipelines and the knowledge we have on the client's data, systems, data warehouse platforms, and technology landscape. XTIVIA performed the following support activities:

- Provided 8x7 data pipeline support and closely monitored ETL jobs
- Responded to and resolved production issues, as well as fixed data and coding issues
- Coordinated with vendors in development, enhancement, and support activities
- Performed ongoing enhancements and fixes to the data warehouse
- Conducted regular performance tuning of existing ETLs
- Converted complex and slow-performing reporting logical data marts to aggregate tables in the EDW
- Performed Database Administration support in MySQL and Oracle
- Performed required data preparation for Data Science pipelines
- Built new ETL jobs using Snowflake, SQL, and UC4

BUSINESS RESULT

By leveraging XTIVIA's experience and knowledge around Enterprise Data Engineering and the client's technical landscape, the client was able to see several results from our involvement. In addition to delivering operational efficiency with support from onshore and offshore, they now have timely availability of data for critical reports and analytics. And, their IT staff enjoys a better work-life balance, which in turn, produces improved customer satisfaction from happy end-users.