



TERADATA DATA WAREHOUSE MIGRATION: NATIONAL DISCOUNT RETAIL CHAIN

ORGANIZATION

XTIVIA's client is a discount retail chain established in 1959. Headquartered in North Carolina, they operate 8,000+ small-format stores in the US as of August 2020. All the store items are priced less than \$10 with the target customer segment of budget shoppers. Our client offers a compelling mix of merchandise for the whole family at the lowest price possible. The average store size is 7,000 square feet, which allows them to open stores in small towns and rural areas.

CHALLENGE

Our client was migrating their data warehouse from Oracle to Teradata. Their IT staff did not have enough knowledge of Teradata performance features and how to take advantage of them, especially when it came to large tables and SQLs with complex predicates and join conditions. Data validation between source and target was done manually, which became a very time-consuming process. Our client did not have enough expertise in automating the data validation and reconciliation processes. These were resulting in project timeline slippages.

SOLUTION

XTIVIA helped the client with making use of Teradata performance features and automated the data validation process to speed up migration, which included:

- Coded automated scripts for data validation between Oracle and Teradata, and assisted with data validation
- Converted complex stored procedures from Oracle to Teradata, and performed data analysis and use of Join indexes for some of the large summary table builds
- Utilized Aggregate Join Indexes for some of the complex queries
- Analyzed business-critical SQL queries and ensured optimal performance in Teradata and created automatic statistics collection scripts
- Performed table analysis for frequently occurring values within each attribute
- Implemented Teradata Multi-value Compression for efficient space management
- Performed query analysis and identified candidates for Partition Primary Index, and implemented Partition Primary Index to improve query performance
- Performed skew analysis on the tables and ensured tables are appropriately distributed based on access needs

BUSINESS RESULT

XTIVIA's solution provided our client technical agility and tangible technical results, including:

- Data Warehouse migration project progress on track
- The client acquired a better knowledge of Teradata and its nuances
- Optimally performing Teradata-based Enterprise Data Warehouse

ABOUT XTIVIA

Since 1992, XTIVIA has proven expertise in delivering leading-edge enterprise IT solutions and support. A few of our service areas include integrating and innovating in MDM, Data Governance, BI/DW, ERP, Cloud, Mobile Apps. If you can imagine the business outcome, XTIVIA can create it with technology. <https://www.xtivia.com>

BY THE NUMBERS:

- 8,000+ Small-Format Stores
- 39,000+ Employees
- 10+ Billion in Annual Revenue

KEYWORDS

Enterprise Data Warehouse, Data Warehouse Performance Tuning, Teradata Performance Tuning, Data Warehouse Migration, Oracle to Teradata Migration

SOFTWARE

Teradata | Oracle | Informatica | SUSE Linux

