RETAILER IMPROVES CROSS-CHANNEL VISIBILITY WITH INFOSYS BIG DATA TESTING SOLUTION

Abstract

A US-based retailer was struggling with poor visibility across various customer channels owing to disparate data sources. They wanted a solution that integrated inventory and pricing data across channels and provided advanced reporting with accurate business insights. Infosys deployed a big data testing solution that consolidated, validated and transformed data to improve testing and reporting. With the Infosys solution, the client has gained seamless testing and omni-channel reporting across inventory, sales and pricing, thereby achieving significant cost, effort and time savings.

Infosys®

Navigate your next

Client background

The client is a US-based global clothing and accessories retailer with operations that span several stores and franchisees in addition to online and mobile channels.

Challenges

The client's existing data services platform had several issues that increased overall cost. With separate sources of truth, online and retail data could not be properly integrated to generate accurate business insights. This posed several difficulties for the inventory management teams. The lack of granular information on cross-channel inventory transactions (such as online purchases that are returned to stores) resulted in more inventory – and higher cost. Inventory management teams could not access cross-channel pricing data, which was a challenge because pricing and promotions differed across channels. Without proper visibility into such data, merchandise was being sold at the lowest price irrespective of the channel, leading to margin erosion.

To address these challenges, the client wanted a solution that offered omni-channel reporting using big data for granular insights and in-depth visibility.

While integration seemed to be a fitting solution, this was riddled with several technical challenges owing to the client's fragmented IT landscape. The data services platform comprised of disparate sources across Oracle, XMLs, Teradata, etc., along with over 250 tables across 11 domains. The company also lacked proper documentation to explain business rules and the relationships between source and target systems. Finally, data validation was cumbersome as testers had to deal with inconsistent and enormous amounts of data from various sources.
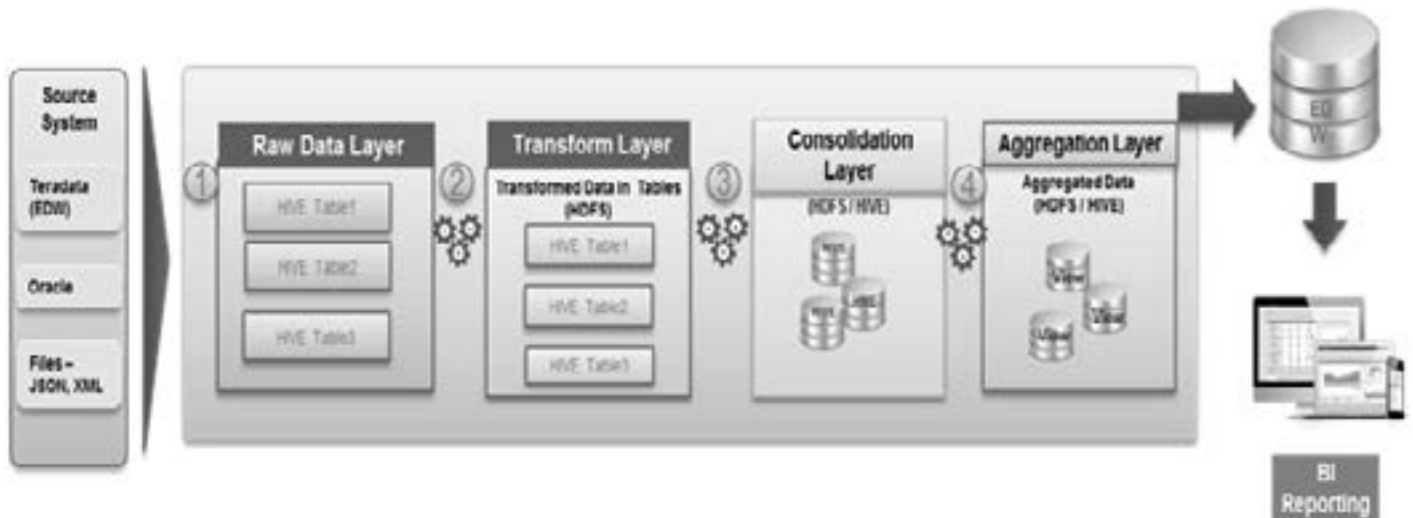
Infosys solution

Infosys deployed a dedicated quality assurance (QA) team to enable end-to-end testing, thereby helping the client meet their goals. We were chosen for our proven expertise in enterprise data warehousing (EDW) as well as our knowledge of the client's landscape.

For this project, we leveraged the Hadoop ecosystem to ingest raw data along with business intelligence (BI) reports validation. We ingested, validated, transformed, and consolidated raw data across various tables and layers based on source-to-target mapping. Data reports were also validated according to mapping logic along with functional report testing.

Two key differentiators make the Infosys solution a unique one. These include:

• Leveraging an automated approach to validate metadata across the data processing layers, thereby identifying data compatibility issues between RDBMS and NoSQL data stores

• Creating in-built quality rules to automate the validation of huge volume and variety of data, thereby reducing the rejection of incoming data files from different source systems

Business benefits

The Infosys solution helped the client achieve key business benefits such as:

• Operational cost savings of US $700,000 with accurate data consolidation and real-time availability of reporting data

• 100% accuracy in data validation through the use of utilities

• 15-20% effort savings with automated data validation

• Shorter cycle times by reusing validation queries

For more information, contact askus@infosys.com

Infosys
®
Navigate your next

Infosys.com | NYSE: INFY

Stay Connected   SlideShare