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BI/Analytics • Applications • Databases

Case Study

Manufacturer Improves Data Quality and Availability Through AWS Modernization

A mid-market manufacturer and distributor of consumer packaged goods was dealing with an existing vendor solution that was not providing the reporting and analytics environment required to manage its business.

Challenges

The customer faced a pressing challenge – their existing solution fell short of meeting their needs. The vendor they relied on held all the cards, owning the source code, application, and the entire process. To make matters worse, the technology they were stuck with was obsolete, barely keeping the lights on with minimal support.

But the customer wasn't about to settle. They had bigger plans in mind, expanding their environment from B2B to include B2C Sales and Operational Data, along with additional data sources. The international organization also wanted to use this opportunity to move to Amazon Web Services (AWS).

It was time for the customer to take control, break free from limitations, and pave the way for a brighter, more dynamic future.

The customer looked to Datavail to help them succeed in this ambitious and complex transformation. The new solution had to be more than just an upgrade - it had to revolutionize the existing process. With the mammoth task of managing services for processing data across tens of thousands of chains and wholesalers, and handling over 1 million records weekly. This data needs to be seamlessly consolidated with master data from various sources, and capable of accommodating varying file specifications and formats.

Dozens of analysts and data scientists would be consuming the data, and the queries, reports, and dashboards would be rolled out to 100s of users.

Solution

Datavail's Data Management team worked closely with the customer in many areas on this project, including:

Data Provider Account Support: Following up with Data Providers regarding recruitment, requirements, test data reviews, and support.

User Support Data Discrepancy Requests: Conducting reviews and audits of Master Data and Sales Order feed results by comparing the source internal Data Warehouse (DW) with Data Provider transaction data capture, ensuring alignment with Master Data.

Data Format Conversion Support: Assisting in converting data formats for Support Data Provider based on mappings to internal DW Master Data. This also included support for testing format conversion loads, ensuring accurate mapping to historical data.

Data Management Support: Loading Master Data received on a weekly basis, handling data files and resubmissions, mapping data providers to master data every week, performing transaction edits to rectify pricing errors, and providing support and maintenance for the Reporting DW database and ingestion processes.

Power BI Administration and Analytics Support: Developing and enhancing reports and dashboards based on the customer's requirements and resolving Power BI reporting configuration issues related to changes in the Reporting DW schema.

In addition, Datavail delivered consultative support to business users, guiding them on how to effectively utilize Power BI services to maintain and improve their reports and dashboards and mentoring to customer personnel on using advanced features of Power BI for reporting and dashboard development.

The architecture of the new AWS-based solution included:

- AWS Simple Storage Service (S3)
- AWS Lambda
- AWS Glue
- AWS Secrets Manager
- Amazon Relational Database Service (RDS)
- Amazon Simple Notification Service (SNS)
- Amazon CloudWatch
- Amazon EventBridge
- Amazon AppStream
- AWS Identity and Access Management (IAM)
- Amazon Virtual Private Cloud (VPC)
- Bitbucket
- Terraform

Results

The customer gained a flexible data ecosystem for inventory management and reporting that enables the organization to adjust to meet changing business objectives. They're now able to provide the right data to the right people at the right time.

They now have the agility for today's and tomorrow's business needs with a modernized system, access to the full breadth of their data sources, and proactive control of their data quality. Their flexibility and speed increased significantly, with improved time to deliver updates and faster data availability.