Case Study: Accelerating Data Migration



Overview

This telecommunications company has a comprehensive services portfolio which provides broadband Internet, fixed telephone and mobile device services, and television and ondemand entertainment for millions of customers across residential, business, government and wholesale markets.

With rapidly advancing technology, the company identified a pressing need to update its core legacy systems for billing and operations. For this data migration, they needed a fast and efficient approach that would ensure business continuity and protect data integrity through the process.

The Challenge

As the company updated its legacy billing support system (BSS) and operations support system (OSS) to modern data center applications, one of the biggest tasks – and source of potential problems – was migrating data from the legacy system to the new one. Every application formats data differently, and ensuring data integrity as data is moved and transformed is critical to preserve business continuity and safeguard regulatory compliance.

A traditional approach would use an SQL process to translate formats from the legacy system into the requisite new system formats. But this customer needed to consolidate hundreds of terabytes of transaction data from several legacy applications into a single new system. Developing an SQLbased solution would take too long, and verifying the accuracy of the data migration would be nearly impossible.

For such a large and complex project, the company required a scalable solution with analytical capabilities to assess data quality, identify errors, uncover root causes and prioritize fixes according to potential impact on revenue or customer experience.

The Solution

Precisely Data360 is an agile data management and analytic solution for both business and IT users. It empowered this telecomm to better manage their data migration project, and continuously improve business results. Its agile capabilities allowed the company to rapidly integrate diverse data, easily discover elusive insights and continuously monitor business operations to expose anomalies, outliers or patterns. These capabilities are used to verify compliance, uncover business improvement opportunities and guard against risks.

Client

Telecommunications Company

Industry

Telco

Challenges

- Modernizing legacy billing operations support systems
- Preserving data quality for massive amounts of transaction data
- Required an analytics solution for data quality assessment, root cause analysis and issues prioritization and resolution

Solution

Precisely Data360

Results

- Reduced time, cost and effort required for data migration with traditional SQL-based methods
- Faster root-cause analysis facilitated rapid resolution with minimal customer impact
- Visual assurance of data and process integrity to stakeholders across business units (e.g., legal, regulatory and audit)
- Enabled accurate data transformation on a massive scale with verifiable results

Data360 Analyze's agile capabilities allowed the company to rapidly integrate diverse data, easily discover elusive insights and continuously monitor business operations to expose anomalies, outliers or patterns.

Precisely Data360 enabled the company to smoothly and successfully complete multiple data migration projects, including the process of migrating billing data from several legacy systems into a modern, consolidated system. Throughout the migration, the company needed to implement compliance controls. Precisely Data360 verified the performance of the new system by checking its ability to generate accurate bills, preventing both undercharges and overcharges.

This migration began with a pilot of several thousand customers, where Precisely Data360 associated extracted billing information with product pricing and tariff plans, and then recalculated bills. The analysis then identified discrepancies with the pro forma bill from the new system and reconciled the differences before the normal billing run.

After the successful pilot phase, the customer migrated data in larger batches, using Precisely Data360 to recalculate (a.k.a. rerate) bills to mimic the billing platform. The customer configured the solution to analyze billing accuracy, catch errors, identify the root causes of errors and fix issues in time for billing runs. Where an SQL-based data migration would have taken months, this telecomm completed the entire migration in just a few weeks.

Precisely Data360 Benefits

- Handles Big Data Rapidly processes billions of transactions, while allowing the organization to maintain existing investments in specialized business applications and systems.
- Increases Business Agility Flexible data management and analytic capabilities enable analysts to integrate multiple data sources and change business logic up to ten times faster than traditional tools. Greater accuracy and faster analysis help decision makers anticipate trends instead of chase them.
- Supports Continuous Business Control Continuous monitoring exposes data anomalies and patterns to guard against risks and uncover opportunities for business improvement.
- Builds Trust in Data Quality Easy-to-interpret, visual interface improves transparency into analytic logic and data, enabling analysts to generate, validate and communicate trustworthy results.