

Case Study:

Midwestern Utility executes an innovative enterprise data strategy

Overview

This midwestern, regional utility company utilities, this company had a wealth of data, but lacked a cohesive strategy for data management and governance. Data assets were siloed and underutilized, processes lacked automation and efficiency, and the reporting was inadequate. The company needed a data solution that would help them to leverage their data assets, ensure quality and mitigate regulatory compliance risks.

Precisely Data360 furnished a framework for data governance, delivering dashboards and reporting features for operational transparency, while providing data quality across the enterprise.

Business challenge

This regional utility provider was looking for a data strategy to improve the visibility, quality and value of their enterprise's data assets. In this highly regulated industry, the company recognized the need for better data governance of their data, including lineage to substantiate data authenticity. One example of a high- priority need was comprehensive analytics to support rate changes with the consumer regulatory boards. The business opportunity was driven by the following factors:

- Data was siloed within various locations and systems across the pre- existing enterprise.
- No data governance solution in place.
- Definitions of critical terms were inconsistent across different business areas (e.g., what is a "customer?"). Existing analysis and reporting were manually generated and cobbled from various sources.
- Data consumers desired better transparency around data governance, quality and availability.

Solution

Precisely implemented an enterprise data exchange for this client built on the Precisely Data360 platform. For the solution's first challenge, the organization identified five high-priority use cases to tackle. These use cases were completed for different audiences with varying responsibilities. Each involved the creation of automated reporting and dashboards for visibility

Client

Regional utility service company that provides residential and commercial customers with a wide range of services, including natural gas, thermal energy and water.

Industry

Energy & Utility

Challenges

In this highly regulated industry, competitive advantages are critical, but impossible without a complete and accurate understanding of the properties, quality and availability of data assets.

Solution

Precisely Data360

Results

Customer implemented an enterprise data exchange (EDX) which delivered an enriched understanding of enterprise data including meaning and purpose, technical and architectural, quality, security, supply and demand characteristics.

into a specific data set, and targeted a specific audience. The solution included:

- **Billing details:** Monthly 'snapshot' of account-level billing transactions Target Audience: Regulatory Affairs
- **Billing exceptions:** Monthly report on prior months' unresolved/pending billing exceptions
- **Target audience:** Billing/Accounts Receivable
- **Facility charges:** Monthly report on utility infrastructure costs for maintenance/management
- **Target audience:** Regulatory Affairs
- **Lower-of water usage analysis:** Impact analysis of seasonal water usage on sewer charges for residential and multi-family customers
- **Target audience:** Regulatory Affairs/Forecasting
- **Top customers:** Report of top commercial customers based on overall revenue and consumption Target Audience: Executive Leadership, Sales and Marketing

These particular use cases included hundreds of millions of records spanning six operational years of data. The source data from Microsoft SQL (MSSQL) was imported into Precisely Data360 which utilizes a Hadoop Distributed File System (HDFS). That data and stored procedures were then converted and leveraged for advanced data quality analyses in the platform.

Results were then delivered to data consumers and executives for review via personalized data views and dashboards.

Precisely Data360 was also leveraged for data governance, which covers the following applications:

- Oracle CIS (Customer Information Suite)
- ESRI (GIS - mapping information for assets)
- Oracle EBS (Accounting)
- Oracle WAM (Assets)
- Pragma CAD (Assets)
- Data360 DQ+

In the initial phases, the data governance scope began with a small footprint containing 131 business terms and 10 models loaded into the repository. The main technical goal was to load technical lineage from Oracle, MSSQL, and Precisely DQ+. In later phases, SQL Service Integration Services (SSIS) and SQL Server Reporting Services (SSRS) lineage and structures will be added into the platform with an assist from Precisely Data360 connectors.

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Results

The client was able to migrate existing processes into an HDFS-based Enterprise Data Exchange system, while jumpstarting their data governance journey. The benefits from this system include:

- A single, searchable source of definition data for various business areas
- Established lineage and relationships for all terms in use
- Dynamic dashboards for executive management highlighting key drivers (e.g., top customers revenue and consumption)
- Analysis and automated reporting to improve operational accuracy and efficiency
- Consumer portal for information sharing and goodwill