denodo

Industry
Energy and Utilities

Profile
This company is engaged in the local natural gas and electric power markets. With an employee base of 20,000, the company delivers energy to more than 2.5 million residential and industrial customers. The company strives to be a socially responsible organization by delivering carbon-neutral energy solutions.

International Energy Company Accelerating Data Integration Projects with the Denodo Platform

In a quest to become data-driven, this international energy company overhauled its data architecture by implementing the Denodo Platform as a bi-directional data access and delivery layer. The new architecture accelerated the company's data integration projects and reduced data delivery times to meet business requirements. The company was able to implement many new cost-optimizing and customer-experience-enhancing uses cases that were not possible before the Denodo Platform implementation.

Business Need

Energy and utility companies are rapidly transitioning from carbon to carbon-neutral energy, and many are struggling to meet their goals. This company is diversifying its energy sources to solar, wind, and other renewables, but this transition is only possible if it is supported by data and analytics that can measure the right KPIs related to systems, machinery, power generation plants, and energy consumers. Data plays a significant role in making informed decisions to optimize and transform energy systems and processes, as well as to personalize the customer experience. This demands data organizations to be more agile, responsive, and flexible.

Until a few years ago, this company maintained traditional technology for data storage and integration: extract, transform, and load (ETL) processes, a data warehouse, and many Microsoft Excel files. However, this resulted in inconsistent data spread across on-premises and cloud data storage systems, with no single source of truth. of the company had difficulty tracking changes across the various data systems. This rigid, inflexible, and complex data ecosystem meant data integration projects were very time-consuming. It was taking an average of 3 months, and sometimes up to a year to complete certain projects, resulting in the inability to answer quick questions about data and difficulty in meeting business requirements.

The company realized that to become a truly sustainable energy company, it had to first become data-driven, so that it can leverage data for day-to-day decision-making. The company wanted to overhaul its existing data infrastructure to incorporate a central, agile data architecture, enhance data governance and security, enable self-service for business users, and if possible, to also reduce overall data infrastructure costs.

The Solution

The company initiated a major data-centric implementation project, designed to create a data infrastructure that could cater to a wide range of business requirements and support new business use cases to help the company become data-driven. The Denodo Platform lies at the center of this new infrastructure, integrating data from disparate sources, such as CRM and ERP databases and the data warehouse, in real time and provide a logical, agile, flexible way to source, integrate, and deliver data to all BI and analytics applications.

The company has significantly improved its digital footprint since the start of the project and reduced the time-to-delivery of data integration projects. The company is also building data governance and security features by leveraging Denodo capabilities and housing all the related policies within the Denodo Platform. To further the reach of data within the organization and democratize access to data, the company has enabled self-service through the Denodo Platform, so users can easily access the data they need. The Denodo Platform has also become the main platform for accessing APIs and web services.
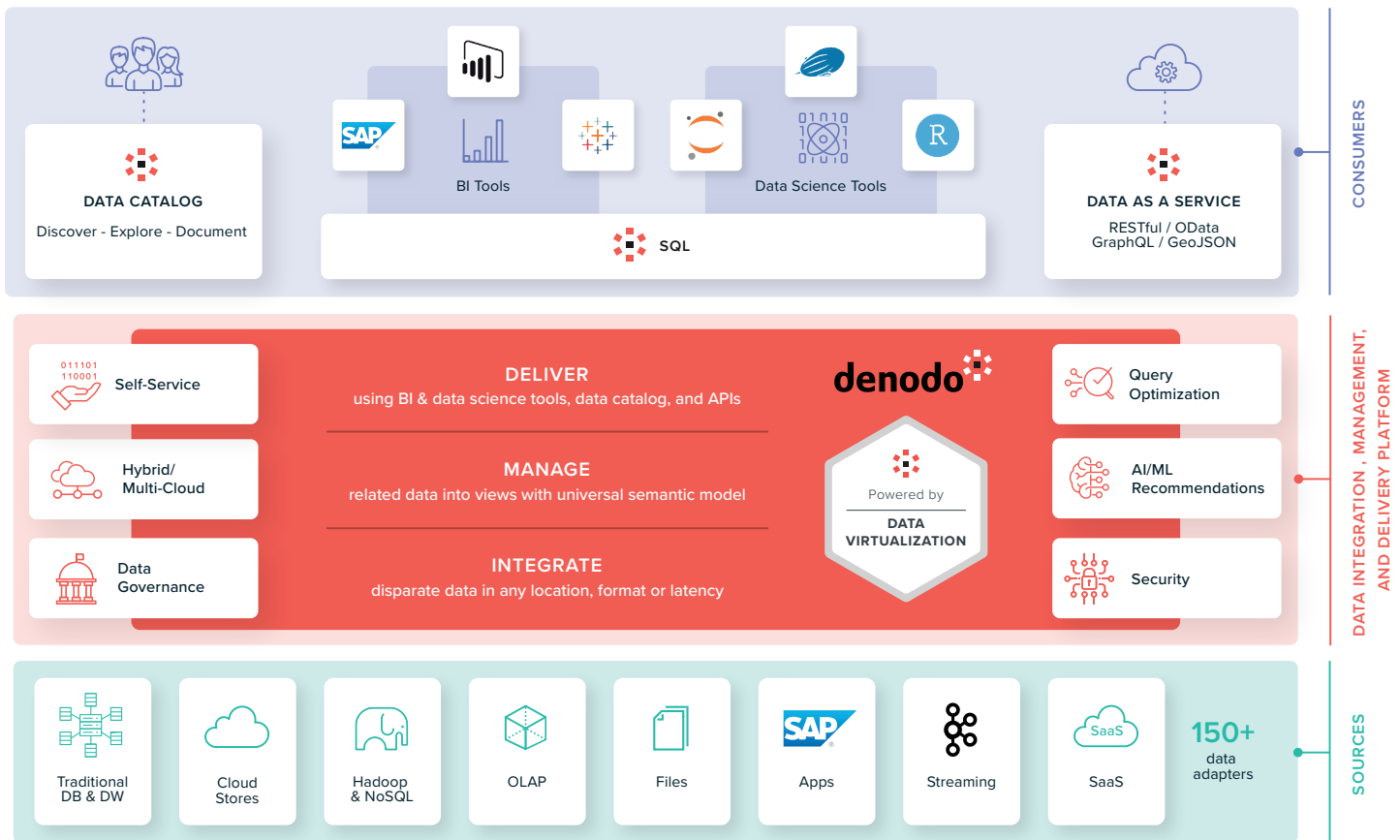
Figure 1: The modern data architecture at this international energy company, with the Denodo Platform serving as a logical data layer that aggregates different forms of data from heterogeneous source systems and makes the integrated data available in real-time to consuming applications.

Results:

1. With the new data architecture, the company improved the delivery time of full data integration projects from three months to two weeks. Overall data integration delivery time was reduced by 67%. More than 7 projects were delivered in 2020, within 6 months of using Denodo's data virtualization capability.

2. The project also helped to reduce data integration costs, by approximately 50%.

3. The Denodo Platform enabled self-service data access, which helped to reduce business teams' manual labor by more than 400 hours a month.

4. 11 data products of descriptive analytics and 4 Data Science solutions were delivered within the first 8 months of 2021. The new data architecture enabled many new use cases which were not possible before. For example, real-time data delivery through the Denodo Platform helped the company to build an app for customers to download invoices and see real-time data consumption. The company launched a customer segmentation project that was able to leverage machine learning (ML) algorithms. The company also launched several new natural-gas-distribution dashboards that enabled the finance team to make better, quicker decisions.

denodo

Denodo is a leader in data management. The award-winning Denodo Platform is the leading data integration, management, and delivery platform using a logical approach to enable self-service BI, data science, hybrid/multi-cloud data integration, and enterprise data services. Realizing more than 400% ROI and millions of dollars in benefits, Denodo's customers across large enterprises and mid-market companies in 30+ industries have received payback in less than 6 months.

Visit **www.denodo.com** | Email **info@denodo.com** | Discover **community.denodo.com**