

DCT and Denodo

Driving Digital Transformation in the Utility Industry

The utility industry is going through major changes, as governments and companies across the globe are increasingly committing to renewable power sources. Moreover, improvement in electricity storage technologies and the advent of distributed energy sources (DERs), are going to further disrupt electricity usage patterns. Power and natural gas trading activities are grappling with lower prices, which means that traders are compelled to trade large volumes to make a small margin.

Independent system operators (ISOs) are moving to a 5-minute settlement model, and new regulatory models continue to increase the complexity and cost of compliance. COVID-19 has further complicated the way everyone works, forcing us to become fully digital workplaces.

All the above business trends have led to an explosion of data and has changed the way we access data. Utilities need to be able to run analytics in real time, in order to make more informed decisions and react to market conditions more quickly. It is essential to be able to run what-if scenarios and advanced predictive analytics on data to accurately forecast business impacts to stay profitable in this competitive industry, and even survive.

Data Challenges

This recent explosion of data is not just in volume, but also in variety and velocity. Perhaps the biggest challenge facing utility companies is the difficulty in collecting all of the data necessary data and reporting on this data in real time. Business users spend a lot of time performing mundane tasks to resolve data issues.

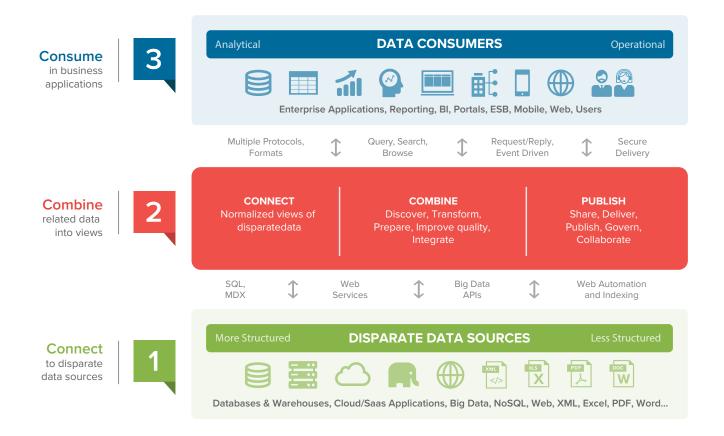
Data challenges include:

- Keeping up with growing data volumes
- Too many data sources, including streaming data sources
- Manual and slow data integration
- · Different source system technologies
- · Assimilating SaaS data

To combat these challenges, the traditional approach of collecting and storing data is no longer viable. The answer is a single unified data access layer for the entire organization that can enable real-time access to data, no matter the size, type, and access method.



The Solution: DCT and Denodo, Working in Tandem



Denodo is the leader in data virtualization, which offers a modern, highly effective method for integrating data. Rather than replicating data to a central repository, data virtualization provides a realtime, integrated view of the data across myriad heterogeneous sources, and these include on-premises and cloud repositories, and structured or unstructured sources. This approach enables companies to establish modern architectures such as logical data warehouses, which possess many of the characteristics of traditional data warehouses yet are also capable of supporting modern data sources such as cloud repositories. Companies gain a single view of the truth, and a single point from which to manage security and governance protocols, while leaving all the source data in its original location. Even when the source data is moved, the data virtualization layer manages such complexities on behalf of the user and any consuming applications, providing real-time access to integrated data, regardless of its location.

DCT is a consulting company with deep expertise in the utility industry as well as in Denodo Platform implementation. Working together, DCT and Denodo enable utility companies to gain a real-time, end-to-end view of data across disparate sources, including smart meters, ISOs, generation units, external price sources, and exchanges, for real-time analytical insights in support of better, faster decisions.



Data virtualization integrates disparate data sources in real time or near/real time to meet demands for analytics and transactional data."

 Create a Road Map for a Real-Time, Agile, Self-Service Data
Platform, Forrester Research

Benefits



IMPROVED EFFICIENCY

Data virtualization allows the analysts to focus on core business issues by eliminating the time-consuming manual data collection processes.



HIGHER PROFITS

Real-time data delivery helps the business make quick decisions to react to market conditions favorably, resulting in reduced risks and improved profits.



DIGITAL TRANSFORMATION

Data virtualization enables unified data access layer for the entire organization which sets a solid foundation for digital transformation. More accurate predictive analytics using Al/ML technologies help differentiate the company in the competitive market.

About DCT Solutions

DCT Solutions Inc., based in Dallas, TX, provides business consultancy and digital transformation services in the energy and utility domain. DCT's team, with a combined industry experience of over 200 years, covers all aspects of the value chain in the E&U industry including energy trading, up/mid/downstream functions, generation, transmission and retail. Being an employee-owned firm enables us to focus on client needs and be nimble in our engagement to deliver value. At the same time, our deep expertise in data, analytics, and systems integration helps optimize IT into a strategic asset. DCT's practice, a silver level partner of Denodo, is comprised of certified data virtualization architects, business analysts, administrators, and developers.

www.dctsolutionsinc.com

About Denodo

Denodo is the leader in data virtualization providing agile, high performance data integration, data abstraction, and real-time data services across the broadest range of enterprise, cloud, big data, and unstructured data sources at half the cost of traditional approaches. Denodo's customers across every major industry have gained significant business agility and ROI by enabling faster and easier access to unified business information for agile BI, big data analytics, Web, cloud integration, single-view applications, and enterprise data services. Denodo is well-funded, profitable, and privately held.

www.denodo.com