

# Large American Financial Holding Company Supports Regulatory Compliance with an Agile, Modern Data Architecture

## Industry

Financial Services

## Profile

The financial services company is a \$3.5B financial holding group that provides commercial financing, lending, leasing and advisory services to small and middle market businesses across more than 30 industries. Through its Internet Bank, it offers a suite of savings options.

***“Denodo provides data virtualization technology that is core to our Data Services Layer to expose data from sources, apply business rules for quality monitoring, and create a proper interface that can be consumed by multiple downstream users of that data.”***

Chief Architect and Chief Data Officer

This large financial holding company based in the United States has crossed \$50 billion threshold in assets, with the latest acquisition of a retail bank, making it a systemically important financial institution and subjecting themselves to stringent regulatory oversight. To meet compliance requirements, the company needs a controlled data environment to enable intercompany data transfers with a complete understanding of lineage from source to destination. Data virtualization from Denodo enables this finance company to create a Data Services Layer with the agility to integrate new data sources, and help with the management and movement of data. Denodo helps the company to ensure that everyone consumes data from a single source of the truth, and reduce unnecessary copies of data and proliferation.

## Business Need

The Company primarily helps finance capital assets such as photocopiers, railcars, and aircraft. Last year, the company entered the retail banking business with the acquisition of a large regional bank. The acquisition propelled the company to become a Systemically Important Financial Institutions (SIFI) or “too big to fail” bank. The company must now operate with strict controls around their data to support a whole series of regulatory oversight and controls that they need to be put in place.

One of the key business requirements for the company is to create a controlled data environment that will support the intense regulatory scrutiny. To accomplish such a goal, they need a modern data architecture that provides agility to integrate new source systems, to evolve the data they expose, and to publish the interfaces that provide the data to downstream consumers.

In the legacy architecture, the consumers were pulling data from the upstream systems directly instead of going through the common data access layer. As a result, information that is modified along the way may not tie across to the various silos.

Further, the company needs a smart data governance initiative to avoid the garbage-in-garbage-out problem. They need the controlled data environment to ensure stewards are accountable for their data and are empowered with the right tools to manage the data and ensure its quality.

## The Solution: Data Services Layer

The financial services company needs a common provisioning point from which to access all authoritative sources of data. A Data Services Layer (DSL) helps by integrating the data. While doing that, it meters usage, monitors in-flight data movement, and orchestrates data APIs. The DSL is not a data repository; it is a framework to leverage data that is persisted, mastered and managed elsewhere. It is a combination of technologies for the management and movement of data within a controlled data environment.

Data virtualization, which is core to the Data Services Layer, exposes the data in the sources, where it is maintained and mastered, and presents it to downstream consumers through a unified interface.

The Denodo Platform for data virtualization provides these key capabilities within the DSL, and, in addition, helps the company to introspect entity relationship diagrams, and create a proper interface that can be consumed by multiple downstream users of that data.

The Data Services Layer (**Figure 1**), comprising the data access and data provisioning layers, ensures that users automatically receive the latest version of all the data without having to specify where they are stored on the system. DSL uses data virtualization not just to expose data from its original upstream sources via common canonical model, but also use it to inject business rules to do data quality monitoring along the way. All downstream consumers access data through common definitions and authoritative upstream sources. The data access layer connects to the system of record applications such as accounts receivable, risk, and human resources, and serves it up to the data mastering systems after data quality checks, whereas the data provisioning layer combines the data from the certified golden sources of truth and delivers it to downstream systems, fit-for-purpose data marts, and reporting applications.

## Benefits

The Data Services Layer supported by data virtualization helps inject pragmatism to the company’s data integration strategy—it enables faster time-to-market and incremental information delivery. DSL helps the company realize value from its data—it successfully enables access of all data through a common provisioning point instead of through the legacy point-to-point integration. Further, data virtualization is able to minimize data replication and proliferation by eliminating data redundancy and unnecessary copies of data. Also, it helps to eliminate redundant data reconciliation efforts.

Smart data governance is critical to the success of any data virtualization effort. Consumers need to trust that data is properly owned, managed, and certified. Data virtualization enables effective data governance. It enforces policies, standards and procedures, defines and publishes authoritative sources of data, efficient data lineage and metadata management, and monitoring of data quality before consumption. Denodo’s data virtualization plays a key role in enabling data governance at this financial holding company.

The company’s modern data architecture enables it to build once and use it many times.

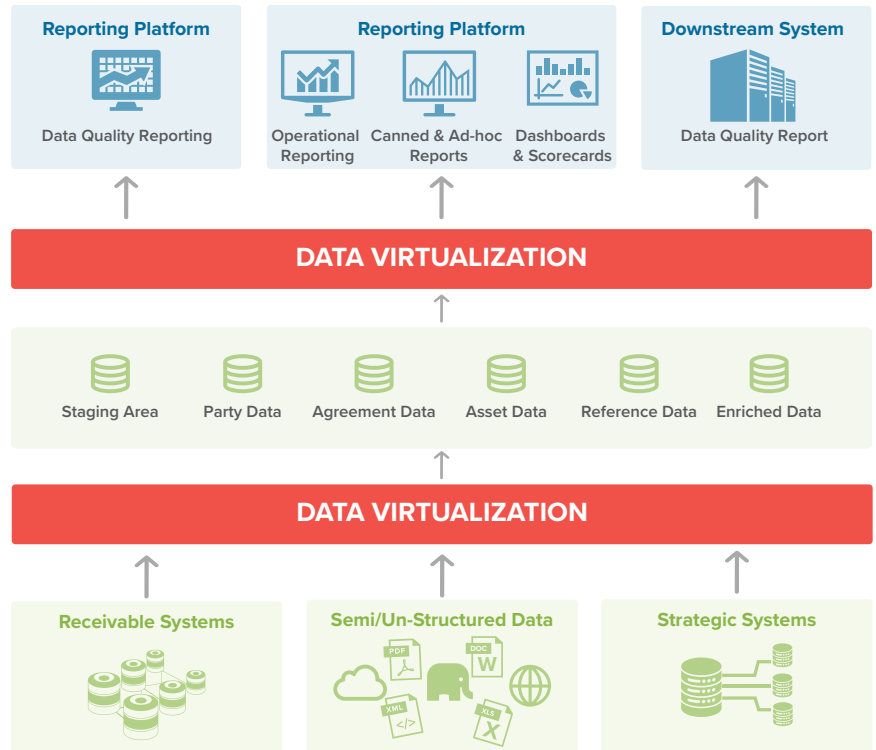


Figure 1: The Data Services Layer

## About 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.