

# Autodesk Successfully Transforms its Revenue Model Using Denodo Data Virtualization.



www.autodesk.com

## Industry

Information Services Software

## Profile

Autodesk is a leader in 3D design, engineering, and entertainment software. Since its introduction of AutoCAD software in 1982, Autodesk continues to develop the broadest portfolio of 3D software for global markets. Customers across manufacturing, architecture, building, construction, and media and entertainment industries, use Autodesk software to design, visualize, and simulate their ideas before they are built or created.

***“Denodo data virtualization has successfully enabled us to modernize our business from conventional perpetual licensing to the modern subscription-based licensing, thus improving our organization’s agility, performance, and profitability while bolstering collaboration across business and IT.”***

Mark Eaton,  
Enterprise Architect,  
Autodesk

Autodesk is a successful business with a thriving market for its creative software applications. Considering the changing patterns in software consumption, the company decided to transform its revenue model from a conventional perpetual licensing to a more modern subscription-based licensing model to increase profits and propel growth.

## Business Need

Autodesk’s existing Business Intelligence (BI) system could not support this critical change to the revenue model. The transition impacted the finance department’s ability to track subscriptions, renewals, and payments, and the BI system, which included an operational data warehouse, could not meet the demands of the business stakeholders, who increasingly required both high quality and timely data.

Autodesk quickly decided that an evolution to an agile BI 2.0 architecture was necessary with a logical data warehouse at its core. Specifically, this would involve moving from their existing physical model to a more logical approach to data integration. Following the decision, a logical data warehouse using the Denodo Platform for data virtualization was implemented to address this change.

## The Solution: Logical Data Warehouse

At Autodesk, data originated from multiple and disparate data sources that included OLTP, flat files, geospatial data, streaming data from social media, and web logs. The traditional integration systems included ETL for batch processing of data from relational databases and Kafka (CSE) for integrating streaming data. Also, Autodesk had an enterprise data lake, which housed data from several big data sources such as Spark and Scala, while the OLTP and Geospatial data was ETL-d and stored in an operational data warehouse. The infrastructure was slow and inefficient, and it was unable to meet the demands for business information and agility required to meet their transition to a new licensing model.

The Denodo Platform for data virtualization was first introduced to Autodesk’s Finance department, who used it to track subscriptions, renewals, and payments. Data virtualization helped to abstract the financial data from their business users without them having to touch or transform any of the physical data. In addition, Autodesk realized the need to protect all of the sensitive data belonging to the enterprise. There are currently several governance, risk, and compliance (GRC) initiatives that are designed to help Autodesk to better manage the handling of sensitive data as well as to mitigate risk. Sarbanes-Oxley (SOX) compliance controls many of Autodesk’s internal initiatives as well. The Denodo Platform enables the management of these and several other compliance initiatives that map to other privacy laws.

Using the Denodo Platform as a logical data warehouse, Autodesk has created a single, unified enterprise access point for any data used within the company (Fig 1.).

### Benefits

Autodesk successfully transformed their revenue model using the Denodo Platform for data virtualization. The major business benefit from the Denodo implementation involved transitioning from a perpetual license-based model to a more modern subscription-based model. This change improved Autodesk’s business performance across the organization, bolstered collaboration by sharing timely information across business and IT, and modernized their business at all levels to ensure greater agility, performance, and profitability. In addition, the solution enabled Autodesk’s external partners to directly connect to Autodesk’s SAP ECC application using web services. This capability allowed them to process payments close to real-time.

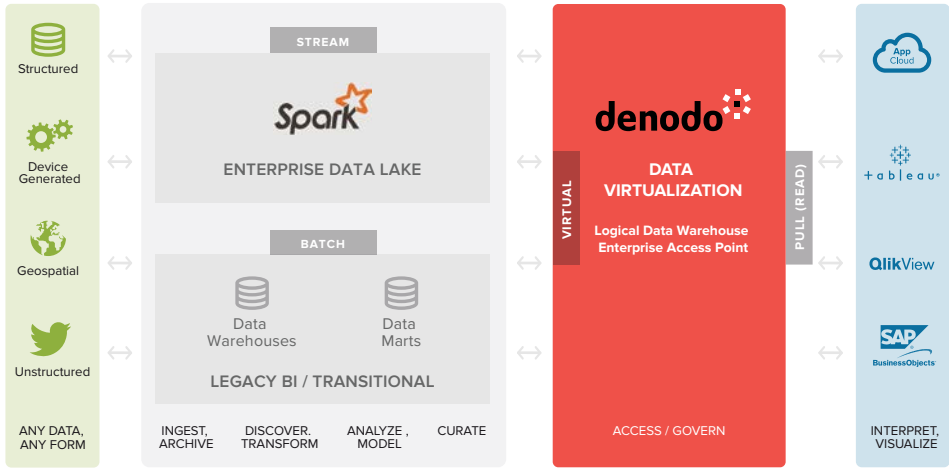


Figure 1: Denodo Platform as a logical data warehouse

Autodesk does not need to move data anymore — they can use less of ETL (Extract-Transform-Load). This implies reduction in making copies of data. Also, for the first time, Autodesk is able to perform single point of enforcement for security and have a uniform environment for data access in place.

The Denodo solution provided the development team the flexibility to understand what they needed to build before they could actually build it. This enabled the development team to plan ahead, and see what their business teams needed from the product before they began. This approach provided agility and made data virtualization attractive to company.

The data virtualization solution also helped Autodesk’s business and development teams to become more collaborative.

### 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.