





www.shimz.co.jp/en

## **INDUSTRY**

Construction

#### **PROFILE**

Shimizu Corporation, founded in 1804, is a leading construction company in Japan renowned for building the tallest structures in the country. As a pioneer in engineering, Shimizu has been taking on challenges in the modernization of Japan since the Meiji period. Despite its historical success, forward-thinking goals, and its emphasis on corporate sustainability, Shimizu faced several significant business challenges that necessitated a comprehensive digital transformation to maintain its competitive edge.



# Challenges

Shimizu Corporation encountered multiple challenges that impacted its operations and data utilization capabilities. The construction industry in Japan faces a declining workforce due to an aging population and a lack of interest from younger generations, highlighting the need for more efficient operational strategies. Rising costs of construction materials due to unstable international conditions increased project expenses. Upcoming regulations in April 2024 mandated stricter control over overtime, prompting Shimizu to prepare better compliance strategies.

To overcome these business challenges, Shimizu aimed to build a digitally enabled business with the vision of integrating digital technology for construction, providing digital spaces and services, and offering digital support for all operations. However, Shimizu found out that there were significant organizational silos and data management issues:

- Fragmentation due to siloed organizational structures (business, design, quotation, construction, compliance across the architecture, public works, and engineering) hindered efficient data sharing and collaboration.
- Managing data quality, freshness, standardization, and governance was challenging.
  Shimizu needed a system to handle diverse data sources, support cross-departmental utilization, and integrate external data.

#### Solution

To address these challenges, Shimizu Corporation adopted the Denodo Platform, which enabled the company to centralize data accessibility and integrate data seamlessly without physical movement of the data. The implementation of Denodo addressed several critical needs:



**Centralized Data Accessibility:** Eliminated the need for physical data copies, reducing lead time for data preparation and enabling robust access control mechanisms.



**Standardized Data Infrastructure:** Created a unified data infrastructure, ensuring data quality, freshness, and governance.

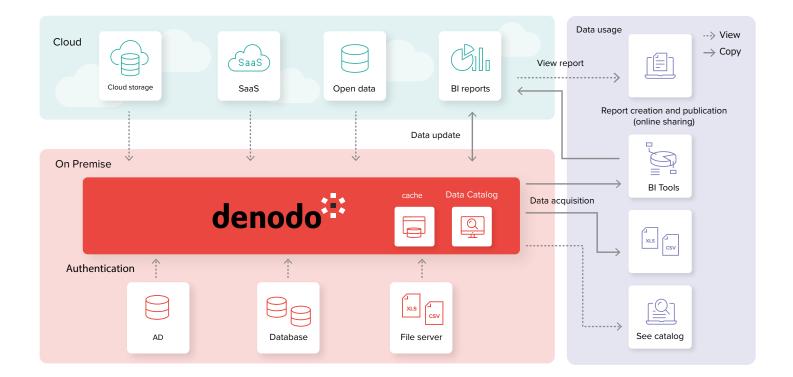


**Data Utilization:** Enabled collaboration across various departments to leverage data for better decision-making and uncover previously hidden data.



**IoT and Unstructured Data Management:** Enabled the business to discover, access, and utilize IoT and unstructured data.





### **Benefits**

The implementation of Denodo brought significant benefits to Shimizu Corporation:



Enhanced Data Accessibility and Governance: Data became easily accessible both inside and outside the organization with governed access, allowing for quicker and more efficient utilization.



Improved Data Sharing and Utilization Mindset: The platform enabled user-level data sharing and quick discovery of data via the Denodo Data Catalog, reducing silos and promoting utilization.



Reduced Lead Time and Cost Savings: Reports that previously took 1-2 weeks to deliver now can be delivered in less than a day. Additionally, the in-house development of reports resulted in substantial cost savings that would have otherwise gone to vendor services.



Low-Code Development: Facilitated low-code application development, allowing departments to create their own applications, and reducing the burden on the Digital Strategy Promotion Office.

Looking ahead, Shimizu Corporation plans to continue enhancing its data utilization capabilities and integrating diverse data sources, maintaining its competitive edge in the industry. Through embracing digital transformation and leveraging the Denodo Platform, Shimizu successfully addressed its data challenges, improved operational efficiency, and set a foundation for a more sustainable and innovative future.









