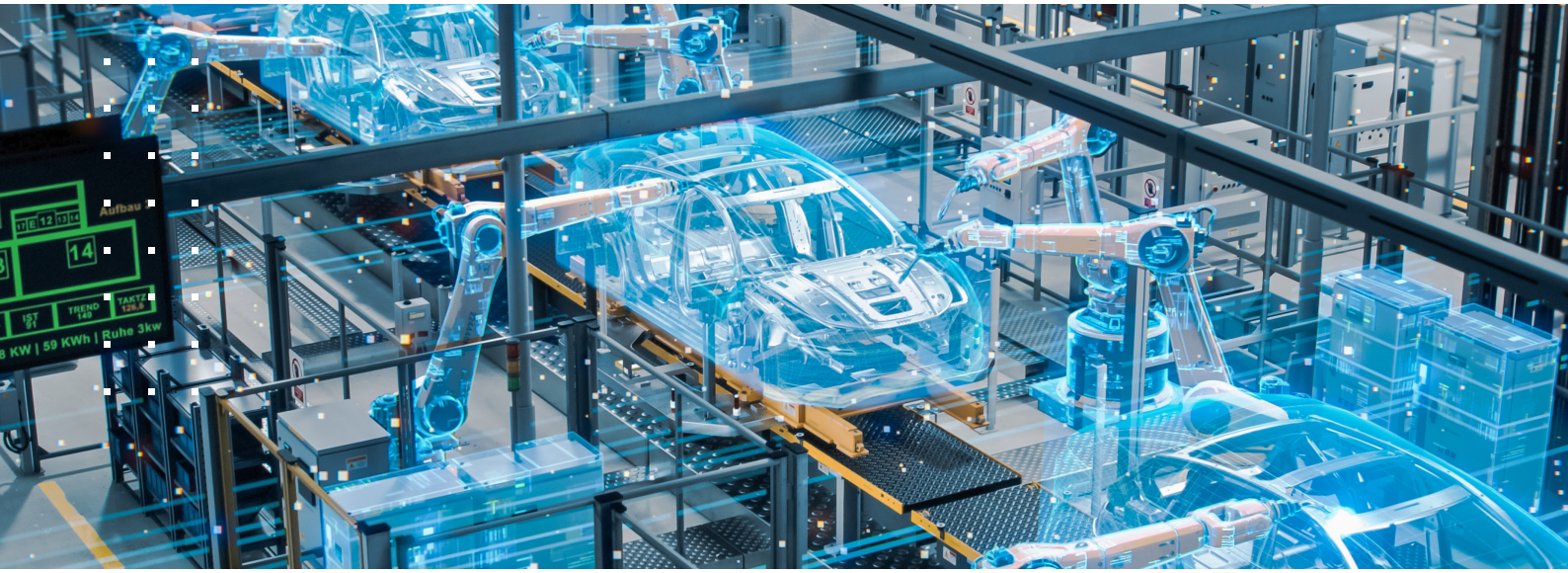

# How a Multi-Brand Auto Giant Unified Real-Time Data Access to Drive Decisions 20x Faster with Denodo

## Overview

A top-tier automotive manufacturer in China, producing hybrid and electric vehicles at scale, recognized that fragmented data systems and delayed reporting were limiting its ability to act decisively in a rapidly evolving market.

The company operates as a large, multi-brand enterprise with centralized oversight and distributed operations across business units and subsidiaries. Despite achieving DCMM Level 4 digital maturity, the enterprise still lacked a unified, real-time view across its core business domains.

It needed to modernize its data strategy to eliminate delays in KPI reporting, reduce the cost and complexity of redundant pipelines, and enable a governed, real-time foundation for analytics, Customer 360, and AI. At the heart of this transformation was a push toward scalable self-service, semantic consistency, and data productization across teams.

To address this, the company implemented Denodo as the backbone of its logical data platform, integrating over a dozen systems, eliminating performance bottlenecks, and enabling governed self-service for analytics, AI, and operational decision-making.

Today, business leaders can monitor sales, production, and inventory in near real time from mobile devices, benefiting from 20x faster insights, while data scientists and analysts work from a governed, reusable layer of virtualized data.

## Challenges

With over 450 data assets across 70+ systems and 15 business domains, the company struggled to turn data into timely, actionable insights. Siloed platforms, inconsistent definitions, and manual processes created friction across analytics, planning, and decision-making.

- Operational data was scattered across ERP, MES, CRM, SRM, and BOM systems, with each subsidiary maintaining its own technology stack, creating inconsistencies and slowing down cross-entity reporting
- Executive dashboards on the app took up to 90 seconds to load, while daily reports required manual aggregation from multiple disconnected systems
- Monitoring capabilities were limited, making it difficult to analyze order trends by region and product, compare volumes to targets, and track production, inventory, and shipment status across business units

- Rigid pipelines made it hard to introduce new use cases like Customer 360, contract compliance, or real-time forecasting and inventory planning

## The Solution: Logical Data Platform with Denodo

The group implemented a logical data management approach to unify real-time data access across subsidiaries, enabled by the Denodo Platform. This not only eliminated the need for physical replication or ETL rework, but also provided an abstraction layer across its hybrid data ecosystem, spanning cloud, on-premises, and subsidiary systems to support unified semantics and federated governed access to live data.

- **Unified semantics**: Established consistent business definitions across subsidiaries, aligning key KPIs such as order backlog, inventory index and production rate, while providing governed access to trusted data for rapid prototyping, AI development, and cross-entity analytics.
- **Abstraction layer**: Exposed live data from core enterprise systems, including SAP, MES, CRM, and marketing platforms, without replication through Denodo's data virtualization capability, ensuring performance and simplified integration.
- **Daily analytics delivery**: Automated data refreshes and dashboard delivery such as daily order analysis, effective order tracking, regional performance, and city-level trends through the Denodo Scheduler.
- **Federated governance enforcement**: Applied group-wide access control using Denodo's role-based security model, enabling cross-border access, end-to-end lineage and traceability through Denodo's active metadata and data catalog integration, aligned to enterprise governance goals.

As part of this shift, business and IT teams began managing domain-aligned data products with governed, reusable assets published through a common business semantic layer. This structure now underpins operational reporting, AI use cases, and self-service analytics across the enterprise, without the overhead of new pipelines.

## Benefits

To complement the technical transformation, the group adopted a federated operating model. Business and IT teams collaborate through governed self-service, with domain teams now responsible for publishing and consuming standardized data products.

Every data product includes traceable lineage, usage tracking, and semantic alignment to enterprise KPIs, improving accountability and reuse across subsidiaries.

- ### Near Real-Time Enterprise Visibility Enabling Faster Decisions
  - Delivered a "One Enterprise, One Screen" view, providing HQ near real-time visibility into sales, production, and inventory KPIs across subsidiaries through a unified semantic data access layer.
- ### Significant Performance and Efficiency Gains
  - Achieved >20x acceleration in report query speed, reducing time from 2 minutes to under 3 seconds.
  - Reallocated 6 FTEs from manual reporting tasks, freeing up time for higher-value analytics and strategic initiatives.
  - Built 10+ business-critical reports in just one week by a single engineer working with 70+ virtualized tables.





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**Denodo is a leader in data management.** The award-winning Denodo Platform is the leading logical data management platform for delivering data in the language of business, at the speed of business, for all data-related initiatives across the organization. Realizing more than 400% ROI and millions of dollars in benefits, Denodo's customers across enterprises in 30+ industries all over the world have received payback in less than six months.