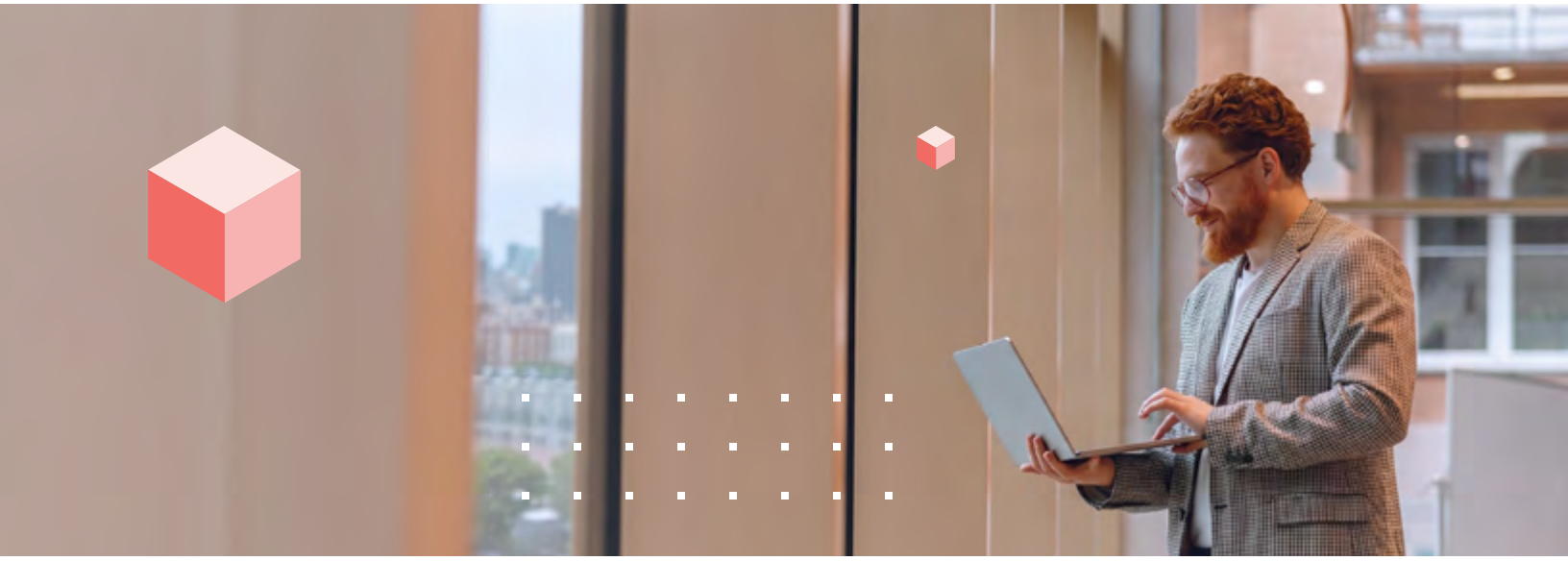


From Weeks to 24 Hours: How a $900B Sovereign Wealth Fund Built a Governed Data Factory

A repeatable operating model for delivering trusted data products

The Strategic Tension: Shared Intelligence, Bounded Access

A premier Sovereign Wealth Fund (SWF) of a leading developed nation in Asia-Pacific did not face a conventional data access problem. It faced a sovereign operating contradiction. Its investment teams needed timely access to shared data themes to assess markets, evaluate opportunities, and support capital allocation. But the institution could not allow those same patterns of access, when aggregated across teams, applications, and datasets, to reveal a broader picture of protected portfolio strategy, internal investment thinking, or other signals tied to sovereign interests, with an eye towards safeguarding the nation's future.

In a sovereign investment institution, the quality of decisions, the protection of proprietary insight, and the resilience of the operating model, all shape the net investment returns that fund the national budget. Data had to be usable, but always within determined boundaries. Access had to be enabled, but never at the expense of strategic confidentiality.

This institution was burdened by the "innovation tax" of manual data movement. Every new requirement was treated as a bespoke project, creating a structural weight on efficiency. To overcome this, the fund shifted toward a unified enterprise data services layer, functioning as a strategic conduit between massive hybrid infrastructures and billion-dollar decisions.

The Challenges: Fragmented Delivery and Compounded Risk

This tension was becoming unmanageable under the legacy delivery model. To enable immediate access, teams relied on manual coding, local extracts, and application-specific APIs. While these tactical fixes worked in isolation, they created a compounded structural risk:

- **Data Inference:** Every new data movement or replicated database widened the surface for sensitive data inference, where individually permissible data elements could be combined to reveal protected investment intent.
- **The High-Concurrency Wall:** As operational demand increased, scaling traditional cloud data lakehouses for high-volume, real-time consumption became cost-prohibitive. They required a delivery engine capable of high-speed throughput without massive hardware overhead.
- **Operational Friction (The MDM Cost Deadlock):** As demand grew, the traditional "rip-and-replace" approach to master data management (MDM) proved cost-prohibitive and technically rigid. High-value analysts wasted hours scavenging for a "golden record" across siloed financial data feeds, creating conflicting definitions for the same portfolio metrics.
- **The Technical Burden:** Onboarding remained slow, and the institution struggled to securely reconcile high-concurrency cloud analytics with protected on-premises assets, without adding massive operational overhead.

What began as a set of delivery bottlenecks, inconsistent definitions, and slow provisioning, had evolved into a fundamental threat to both institutional speed and strategic confidentiality.

The Solution: From Copy-Based Delivery to a Governed Enterprise Data Services Layer

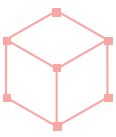
1 A SINGLE GOVERNED GATEWAY FOR A HYBRID LANDSCAPE

The fund moved beyond the "copy-and-control" model by establishing a governed enterprise data services layer enabled by the Denodo Platform. This unifying layer functions as a single governed gateway that decouples data consumption from physical residency.

- **The "Zero-Copy" Delivery Ledger:** The institution established a centralized ledger that globally applies a single, authoritative version of business logic. Whether data is drawn from modern cloud platforms like Snowflake or legacy on-premises Postgres instances, applications receive consistent, decision-ready data, without physical movement.
- **Preserving Portfolio Isolation:** By enforcing policy at the point of access rather than the point of storage, the fund can deliver shared data themes across hybrid environments while mitigating the risk that individually legitimate data elements could be aggregated to expose protected sovereign strategy.

2 THE DATA ASSEMBLY LINE: DELIVERING DATA PRODUCTS AT SCALE

- The new model industrialized the path to production. Through its Silver Tier automation framework, the fund transitioned from artisanal, manual engineering to a repeatable Industrial "data factory" model. This shift reduced the time required to provision governed data products from weeks to as little as 24 hours, and the institution envisioned a further reduction of that timeline to minutes. What had previously depended on repeated engineering effort could now be delivered through a more scalable, disciplined model.



3 SECURITY AND PERFORMANCE AT SCALE

To resolve the paradox of broad access versus absolute secrecy, the new architecture reconciles high-speed throughput with unbreakable trust.

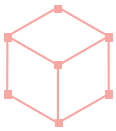
- **The "Zero Super Admin" Model:** Aligned with a strict need-to-know mandate, the fund implemented a "dynamic query interception" strategy. The system analyzes the "intent" of a query in real time, automatically killing any request that attempts to reveal protected national reserve totals or sensitive sovereign signals.
- **High-Concurrency Efficiency:** The architecture supports high-volume operational workloads, enabling real-time data delivery across investment applications. In comparative evaluations against alternative approaches, it demonstrated stronger efficiency and suitability for the fund's operational and hybrid delivery requirements.
- **Secure Hybrid Integration:** The platform acts as the secure "stitching point" between restricted on-premises vaults and cloud analytics, allowing for unified insights without sensitive data ever leaving its protected home.

Business Impact: What Changed Institutionally

The result was more than faster access to data. The fund established a model that improved control, accelerated delivery, and made trusted data product delivery scalable across the institution.

Supported by Denodo, the institution:

- **Accelerated the Path to Production – From Weeks to 24 Hours:** Through the Silver Tier framework, the fund compressed the provisioning cycle for governed data products from weeks to less than 24 hours, creating a scalable, disciplined model for institutional delivery.
- **Delivered the "Trifecta" Capability Model:** Unlike other solution providers, Denodo successfully unified three critical enterprise pillars on a single platform: comprehensive self-service, data products-as-a-service, and automated global security.
- **Enabled Institutional Scale:** The platform scaled from 50 to more than 1,000 users in six months, supporting thousands of reusable data products and handling more than 20 million monthly data service calls.
- **Hardened Strategic Confidentiality:** By enforcing policy at the point of access and eliminating uncontrolled replication, the fund expanded data utility while maintaining the isolation required for sovereign portfolio protection.



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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.