CASE STUDY

TransUnion Enables Global Self-Service Analytics in Regulated Environment with Dremio

At a Glance

The Customer

TransUnion

Challenge

TransUnion needed to enable self-service analytics across a complex hybrid multi-cloud environment while maintaining strict governance and compliance for highly confidential personal data spanning 1 billion individuals across 30 countries.

Solution

TransUnion implemented Dremio as their unified query engine and data mesh platform, enabling secure self-service access to structured and unstructured data across their global infrastructure while maintaining fine-grained access controls and regulatory compliance.

Results

- Enabled secure data access for diverse user groups including data scientists, analysts, and external customers
- Created unified SQL-based querying across hybrid multi-cloud environments
- Delivered seamless self-service analytics while maintaining strict regulatory compliance
- Supported innovative solutions that expanded credit access to 149 million additional consumers globally

The Customer

TransUnion is a global information and insights company operating in 30 countries across five continents, managing data on over 1 billion people worldwide. Far more than a traditional credit reporting agency, TransUnion makes trust possible by ensuring every individual is reliably represented in the marketplace through powerful consumer insights and multi-layered, contextualized understanding of personal identity across online and offline fragments. The company's mission of "information for good" drives their development of products and solutions that enable credit, fraud prevention, risk management, marketing, and advanced analytics capabilities while maintaining the highest standards for data protection and regulatory compliance.

The Challenge

TransUnion faced the complex challenge of building a global analytics platform that could handle highly confidential personal data while enabling innovation and experimentation across diverse user groups. The company needed to balance seemingly conflicting requirements: maintaining the trust of billions of individuals whose data they manage and the businesses that rely on this information, while simultaneously enabling self-service analytics capabilities for internal data scientists, analysts, and external customers.

The challenge was compounded by TransUnion's digital transformation journey, which involved embracing public cloud capabilities while maintaining a hybrid multi-cloud architecture that spans public clouds and on-premises data centers. This created significant complexity in terms of data diversity, with structured and unstructured data sources, proprietary datasets, and public data sources all requiring unified access and analysis capabilities.

Most critically, TransUnion needed to ensure secure and compliant data management across different regulatory environments in 30 countries, while still building an analytics platform that was easy to use, performant, and capable of enabling continuous innovation. The platform needed to support fine-grained access controls, role-based permissions, and column-level security while providing seamless user experiences across different access methods including SQL querying, BI tools, and point-and-click interfaces.

The Solution

TransUnion selected Dremio as an early adopter, implementing it as their unified query engine and the foundation of their global data mesh architecture. Dremio enabled TransUnion to bring together state-of-the-art tooling alongside self-service data access in a governed way, creating a seamless bridge between their complex, geographically distributed data sources and their diverse user community.

The implementation leveraged Dremio's capability to create a unified data mesh across all of TransUnion's structured and unstructured data sources, enabling users to access and explore data across the enterprise using SQL. As TransUnion's hybrid multi-cloud architecture evolved, Dremio became their single consistent query engine, supporting not just SQL-based querying but also BI tools and point-and-click interfaces in a common, unified manner.

Dremio's fine-grained access controls proved essential for TransUnion's regulatory compliance requirements, enabling the company to manage complex authorization and entitlement schemes behind the scenes while providing users with seamless data access experiences. The platform supports role-level permissions, column-level security, and user group-based access to specific datasets, folders, and tables, all managed through well-defined processes and policies that ensure compliance across multiple regulatory jurisdictions.

The architecture allows TransUnion to manage the complexity of governance and security requirements transparently, enabling their associates, data scientists, and analysts to focus on innovation and creating "information for good" rather than navigating technical and compliance barriers.

Results

Dremio's implementation has enabled TransUnion to achieve their vision of secure, compliant, and innovative analytics at global scale. The platform successfully supports diverse user groups including internal data scientists, data analysts, and external customers, all accessing data through a unified, governed environment that maintains the highest standards for data protection and regulatory compliance.

The seamless, easy-to-use data environment has enabled TransUnion's teams to focus on breakthrough innovations that demonstrate the power of "information for good." In the United States, data scientists leveraged the platform to develop enhanced credit scoring models that combine trended credit data with day-to-day consumer activities, enabling approximately 60 million additional consumers to gain access to credit opportunities who were previously excluded from the traditional credit ecosystem.

In India, the platform supported TransUnion CIBIL's collaboration with geospatial data company Satur to combine traditional bureau information with agricultural land data. This innovative approach created comprehensive lending reports that help financial institutions make informed decisions about agricultural loans, resulting in easier credit access for a staggering 89 million farmers in India's agricultural economy.

The global impact of these innovations, enabled by Dremio's secure and compliant analytics platform, has expanded credit access to 149 million additional consumers worldwide. This achievement exemplifies TransUnion's mission of using data to create personal empowerment, economic opportunity, and financial inclusion while maintaining the trust and security that their global operations demand.

ABOUT DREMIO

Dremio is the intelligent lakehouse platform for the business, serving hundreds of global enterprises, including Maersk, Amazon, Regeneron, NetApp, and S&P Global. Based on open-source technologies like Apache Iceberg and Apache Arrow, Dremio provides an open lakehouse architecture enabling the fastest time to insight and platform flexibility at a fraction of the cost.
Learn more at www.dremio.com.