VELTRIS
INNOVATE | ACCELERATE | TRANSFORM

GLOBAL CYBERSECURITY LEADER MODERNIZED DATA DISCOVERY AND ANALYST WORKFLOWS WITH AI

Data catalog and Generative AI for cybersecurity intelligence

Challenge

A global cybersecurity leader needed to strengthen how internal teams discovered, governed, and acted on the data behind its AI-driven security offerings. Its existing data catalog lacked business glossaries, profiling, and automated testing, while security analysts spent significant time manually reviewing technical documents, policies, and structured data to respond to queries. Both gaps slowed decision velocity and limited the leverage of internal knowledge across the organization.

Approach

Rebuilt the internal data catalog with business glossaries, data dictionaries, and profiling capabilities, unifying sources across MySQL, BigQuery, and Bigtable into a single discovery layer.

Engineered a ReactJS front end with a Java backend, integrating Postman and Selenium for automated testing to ensure continuous quality and reliability at scale.

Deployed a Retrieval-Augmented Generation system using an embedding model to vectorize queries and search document and SQL-based knowledge bases for the most contextually relevant content.

Embedded agentic enhancements that dynamically identify the right source — document, SQL, or table — and surface consolidated, context-aware answers through an intuitive analyst interface.

Outcomes Delivered

Unified fragmented data assets into a governed, self-service catalog supporting glossaries, profiling, and automated quality checks across cloud sources.

Replaced manual document review with AI-driven retrieval, accelerating analyst response times and freeing capacity for higher-value security work.

Established a scalable foundation that adapts to growing data volumes and extends Generative AI into core internal workflows.

Closing

Veltris combined data engineering depth with applied Generative AI to give a global cybersecurity leader a modern discovery and intelligence layer — turning fragmented internal knowledge into a governed, AI-ready asset that compounds analyst productivity.