Datafleet

AI-driven environmental data analysis

CHALLENGES

A provider of environmental data assists cities in identifying dirty traffic signs, road damage, and illegal waste dumping using cameras installed on waste disposal vehicles. Challenges included varying image quality due to weather/daytime changes and insufficient GPS data as well as motion blur, white balance issues, and image noise complicate data accuracy. The need for real-time data processing and scalability further added to the complexity.

BENEFITS

- **Improved customer satisfaction** by providing better data quality

- **Leveraged scalability** of the cloud by migrating AI models and data collection from edge devices to Google Cloud

- **Optimized resource usage** by efficiently processing and streaming data to the cloud

GOOGLE CLOUD SOLUTIONS

- Cloud Run
- Cloud Storage
- Pub/Sub
- Cloud Run Functions
- Video Intelligence API

T··Systems· Google Cloud

Law Monitoring

Legal efficiency and compliance via real-time automated document comparison

CHALLENGES

Legal departments in the automotive industry faced significant challenges in tracking and complying with frequent amendments to laws and regional regulations. The process was time-consuming and complex, with difficulties in keeping up with the numerous legislative changes. A lack of real-time updates led to compliance risks and inefficiencies in legal workflows, potentially resulting in costly legal issues.

BENEFITS

- **Increased efficiency** by automating the monitoring and comparison of legal documents, reducing manual work

- **Improved accuracy** with real-time notifications, minimizing the risk of missing important legislative changes

- **User-friendly workflow** that eases the analysis of legal content and boosts productivity

GOOGLE CLOUD SOLUTIONS

- Vertex AI Platform
- CloudSQL
- Gemini
- Cloud Run Functions
- Cloud Run
- Firestore
- Cloud Storage
- Cloud Monitoring/Logging
- Compute Engine
- GKE

T··Systems· Google Cloud

IoT Cloud Service Provider

AI-driven inventory management for advanced demand forecasting

CHALLENGES

The inventory management system relied on an outdated stochastic model, leading to inefficiencies in forecasting order demands from dealers and sub-dealers. This resulted in suboptimal stock levels, either causing excess inventory or shortages. Additionally, the existing system struggled to account for the varying needs of different product groups and seasonal effects, complicating the inventory storage process.

BENEFITS

- **Improved demand forecasts** through advanced machine learning models, leading to optimal stock levels

- **Enhanced operational efficiency** by modernizing the inventory management process and minimizing excess or shortages

- **Streamlined data management** with centralized storage and processing, improving data accessibility and handling

GOOGLE CLOUD SOLUTIONS

- Vertex AI Platform
- Vertex AI Model Garden
- Vertex AI AutoML Tabular
- Vertex AI Endpoints
- Gemini
- Cloud Run
- Cloud Storage
- BigQuery
- BigQuery ML
- Timeseries Insights API

T Systems · Google Cloud

German Authority

Leveraging AI for efficient data structuring

CHALLENGES

Receiving job advertisements in unstructured formats from various channels posed significant difficulties for the agency's IT systems. Structuring these job ads efficiently was challenging, requiring automatic transformation of unstructured texts into structured data using several attributes for seamless processing.

BENEFITS

- Increased Google know-how with Vertex AI LLM for data extraction

- Improved efficiency via automation, aiming to save more than 50% of manual work

- Handling of handle large volumes of data without infrastructure limitations possible with Google Cloud's capability & scalability

GOOGLE CLOUD SOLUTIONS

- Vertex AI Platform
- Vertex AI Model Garden
- Vertex AI Workbench
- Document AI
- Gemini
- Google Cloud Storage

T··Systems Google Cloud

Public organization

Intelligent enterprise search

CHALLENGES

Managing a growing database of reports from international development projects was increasingly complex. Users struggled to efficiently search for specific information, such as lessons learned, across different documents. This resulted in time-consuming manual research, burdening users and reducing overall productivity. The challenge was to streamline this process, reduce search time, and provide accurate, easily accessible information.

BENEFITS

- **User-friendly search** in a conversational manner

- **Efficient information retrieval** with accurate insights from multiple documents

- **Rapid implementation** leveraging Google Cloud services and resources

- **Expert consultancy** for AI development and best practices

GOOGLE CLOUD SOLUTIONS

- Vertex AI Platform
- Vertex AI Search
- Gemini
- DocumentAI