



UPS Leverages Striim and Google BigQuery for AI-Secured Package Delivery

Challenge

The surge in package theft due to increased online shopping outpaced traditional security measures, exposing significant operational vulnerabilities. The vast amount of data from rising package deliveries overwhelmed existing systems, underscoring an urgent need for advanced data management. Additionally, the lack of real-time data processing hindered UPS Capital's risk management and rapid response capabilities, affecting operational efficiency, consumer trust, and financial performance. This emphasized the critical need for a sophisticated solution to address the complexities of modern package delivery and logistics.

Solution

UPS Capital integrated Striim's real-time data streaming technology with Google BigQuery's analytics capabilities to enhance delivery security. Striim enabled immediate data ingestion from various sources, facilitating real-time risk assessments and proactive decision-making. The data flowed seamlessly into Google BigQuery, where advanced analytics and machine learning predicted delivery risks and optimized logistics strategies. The innovative DeliveryDefense™ Address Confidence system utilized this data to assign confidence scores to delivery locations, improving predictive accuracy and allowing businesses to manage delivery risks effectively.

Results

- **Improved customer experience:** The accuracy and efficiency in handling packages increased, bolstering consumer confidence in UPS Capital's delivery services.
- **Cost-savings:** By minimizing losses from theft and optimizing delivery routes, UPS Capital experienced cost reductions.
- **Advanced AI and ML implementations:** Striim facilitates the deployment of sophisticated AI and ML models at UPS, aiding in anomaly detection and fraud prevention.
- **Improved data processing and analytical accuracy:** Striim's AI innovations, through embedded vectors in streaming data, enhance UPS's data processing efficiency and real-time analytical capabilities.

UPS Capital Reaps Operational Rewards



280K+
Claims
paid annually



\$236B
Declared
value



690K
Shippers
protected

“At UPS, we’re reshaping the shipping landscape by prioritizing lower premiums and improved convenience for our customers. Opting for high-confidence shipping addresses not only slashes costs but also assures customers of dependable and secure deliveries, empowering them to shop online with confidence and ease. Striim and Google Cloud have jointly enabled us to enhance the customer experience with AI and ML.”

Pinaki Mitra

Vice President, Data Science
& Machine Learning at UPS Capital