



A High AI-Q[™]
Company



AI-Powered Prescriptive Pricing Solution for Logistics

Transforming freight bidding with an AI-driven platform that streamlines RFP responses and recommends optimal, data-backed shipping rates.

Overview

We developed a cloud-based prescriptive pricing engine using Google Cloud AI and AWS to automate the qualification and valuation of shipping tenders.

- Implemented an ETL pipeline (Extract, Transform, Load) to process complex shipper files, predicting header rows and necessary columns with machine learning.
- Delivered a 43% increase in bid win rates and achieved 95% faster quoting by standardizing pricing across globally indicated benchmarks.



Client Profile

Headquartered in the US, this fintech innovator empowers logistics service providers to scale customer relationships. Their platform focuses on minimizing scope creep and streamlining the RFP process for carriers and brokers across the global supply chain.

Challenges: Manual Complexity in Freight Bidding and Time-Consuming Analysis

Manually processing massive volumes of internal and external data for lane-level pricing caused significant delays.

- **Low Competitive Edge:** Inaccurate or slow bid responses led to a low win rate for high-value shipping contracts.
- **Workflow Inefficiency:** Lack of standardization in the RFP process prevented decision-makers from reacting quickly to dynamic market shifts.

QBurst Solution: Intelligent Tender Collaboration

The solution utilizes Google Cloud AI to analyze diverse business contexts and dynamic market scenarios, recommending optimal bids through three core modules: Shipper File Processing, Pricing Advisory, and Market Intelligence.

- **Automated Data Processing:** Leverages Python Pandas, Naive Bayes classifiers, and TF-IDF algorithms to identify and transform complex shipper RFP files instantly.
- **Predictive Pricing Engine:** Uses Scikit-learn and historical benchmarks to validate prices against global market trends, ensuring accurate outcomes.
- **Event-Driven Architecture:** Built on a microservices framework using Docker and Kubernetes (EKS), with AWS Lambda and RabbitMQ handling asynchronous processing for high-volume bids.

Technical Highlights

- **Microservices Orchestration:** Deployed using Kubernetes and AWS EKS for seamless scalability.
- **Real-time Dashboards:** Intuitive ReactJS-based visualizations for historical rates and margin analysis.
- **Scalable Messaging:** Utilized SQS, SNS, and CloudAMQP for robust, event-driven task handling.
- **Hybrid Cloud Capability:** Combined Google AI's ML power with AWS's elastic infrastructure.

Impact

- **43% Higher Win Rate:** The solution significantly improved bid success through high-accuracy pricing forecasts.
- **95% Faster Quoting:** Automated lane-level pricing reduced response times from days to minutes.

- **Informed Decision-Making:** Real-time visibility into bid progress and dynamic pricing factors for analysts.
- **Strategic Automation:** Automated lane assignments based on custom stakeholder criteria improved operational flow.