INSPYR SOLUTIONS

Optimizing Logistics Pricing with AI-Powered Dynamic Models

Challenge

A national logistics company specializing in freight and transportation services needed a more accurate approach to setting dynamic prices. Traditional methods relied on a normal distribution curve, which frequently produced significant pricing errors. These errors often resulted in overcharging or undercharging clients, negatively impacting profitability and customer satisfaction.

Additionally, the inefficiencies created by manual adjustments placed a heavy burden on the pricing team, particularly when handling the company's high transaction volumes. The business sought a modern solution to reduce these errors, increase efficiency, and improve customer trust in their pricing models.

Solution

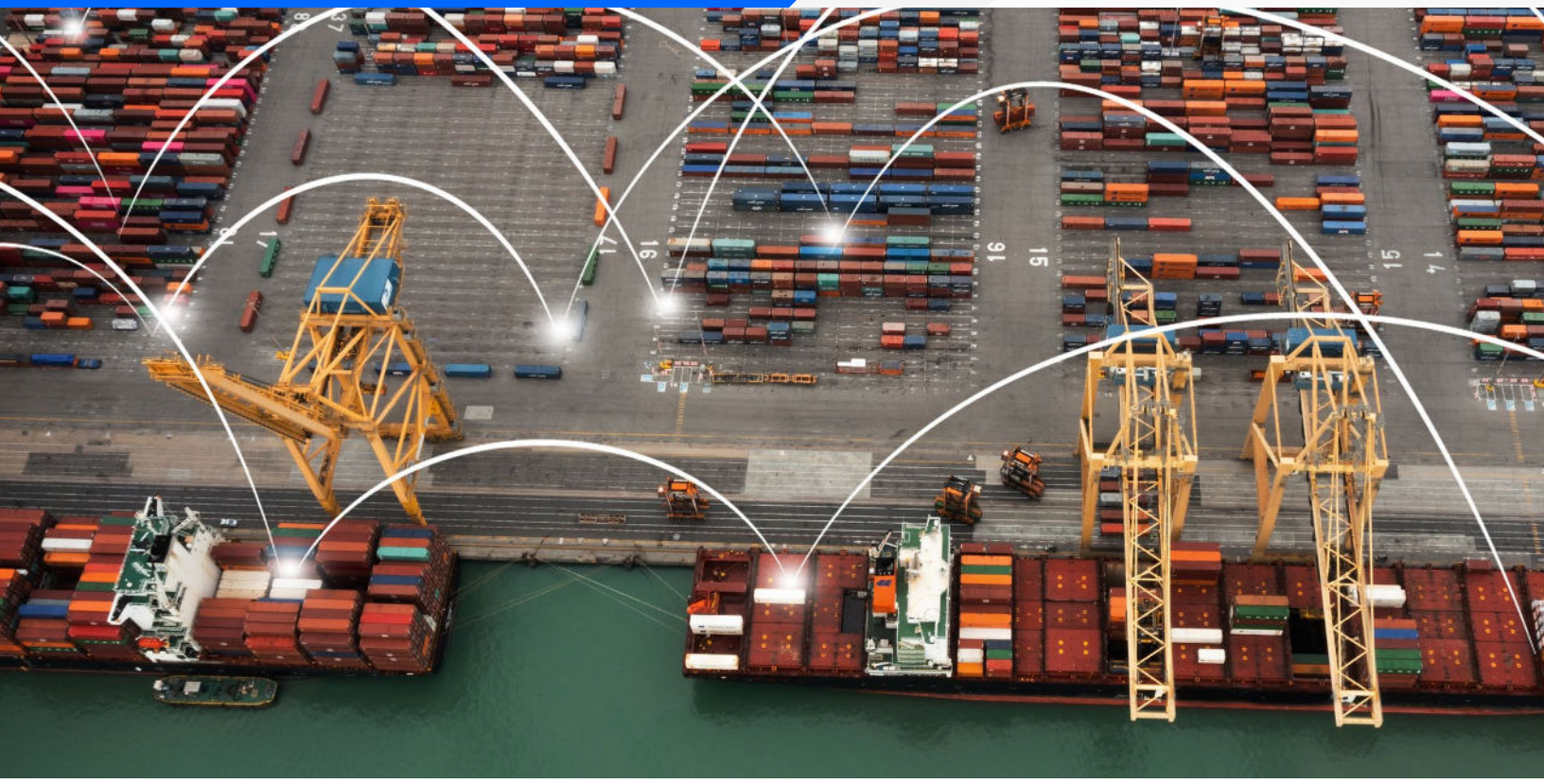
INSPYR Solutions was selected to design and implement a new AI-driven pricing solution. The technical team created a sophisticated statistical model using Python libraries such as NumPy and SciPy.

This advanced model recalibrated costs across different load categories to improve the accuracy of the pricing curve. The system was further enhanced by incorporating daily training on historical transaction data, allowing the model to adapt in real time and minimize pricing errors.

Key elements of the solution included:

- **AI-Powered Pricing Optimization:** Leveraging Python-based frameworks for statistical accuracy, the system could adjust and optimize pricing in real time.

The AI-driven solution decreased pricing errors from 14% to just 6%.



- **Dynamic Recalibration:** The solution could adjust costs by load category to improve alignment with market conditions.
- **Continuous Learning:** The AI system utilized daily retraining on transaction data to minimize future errors.

Outcome

The AI-driven solution delivered measurable improvements for the logistics provider:

- **Error Reduction:** Pricing errors decreased from 14% to just 6%.
- **Cost Savings:** Each transported load now yields an average savings of $10.
- **Efficiency Gains:** The pricing team's workload decreased significantly, enabling them to focus on higher-value activities.
- **Customer Satisfaction:** More accurate and consistent pricing fostered stronger client relationships.

Client Profile

The client is a national logistics company with operations across the U.S. Specializing in freight and transportation services, the company employs more than 500 people and supports businesses through reliable, cost-efficient shipping solutions.

Technologies Supported

Artificial intelligence, machine learning, Python frameworks (NumPy, SciPy)

About INSPYR Solutions

Technology is our focus and quality is our commitment. As a leading expert in delivering flexible technology and talent solutions, we strategically align industry and technical expertise with our clients' business objectives and cultural needs. Our tailored offerings include a wide variety of professional services, project solutions, managed services, and talent resources, all bolstered by our strategic partnerships with cutting-edge technology services. By always striving for excellence and focusing on the human aspect of our business, we work seamlessly with our talent and clients to match the right solutions to the right opportunities. Learn more about us at www.inspyrsolutions.com.