SEI

Building a Sales Recommendation Engine for an Online Auto Market

Challenge

The largest online automotive market in the United States wanted to personalize auto auction inventory recommendations for auto dealers. This would involve analyzing online auto auction buying behaviors to align potential dealers with auto auction inventory, providing a daily dashboard the online market's internal sales teams could use to identify prospective dealer sales opportunities, and utilizing machine learning algorithms to identify patterns in dealers' buying behaviors that could be leveraged to drive new revenue opportunities.

Advanced Analytics

Solution

SEI built and delivered a machine learning solution that leveraged cluster algorithms to identify dealers' buying patterns and embedded it directly into the online market's sales opportunity dashboard. To do so, we explored transactional data to gauge modeling feasibility and identify data discrepancies and reviewed our findings with senior management on a recurring basis to educate — and secure buy-in from — key stakeholders. We then operationalized the machine learning solution in an AWS cloud environment and made its recommendations available in the sales opportunity dashboard.

Operational Excellence

Solution Design

Results

SEI's solution supported the launch of a new dealer-to-dealer sales network and became the online market's primary tool for generating dealer sales within the new platform. Just a short time after the launch of the market's sales opportunity dashboard, dealer sales opportunities increased by 400%.