

Increasing Efficiency of Farm Equipment Maintenance

Challenge and Opportunity

A retail agricultural cooperative serving the agronomy, energy and farm supply needs of its members and customers across eight states wanted to help its members by creating a tool they could use to predict when its tractors needed maintenance service.

Approach

- The team carefully analyzed the data provided by members of the cooperative regarding the tractor's maintenance schedules recent repairs, brands, and usage hours.
- Using Python, the team developed a predictive model which specifically outlined when equipment would need repair or maintenance.
- The model was created to be easily accessible to the cooperatives over 200,000 farmer-members.

Results

The model successfully predicted tractor maintenance needs and reduced offsite equipment failure rates by 90 percent. This resulted in increased profit for the cooperative's members.

50+

Clients Served*

20+

Data Services Offered

185%

Average ROI
Based on 2 years of cost decrease or revenue increase over consulting fees *

(excluding internal implementation cost)