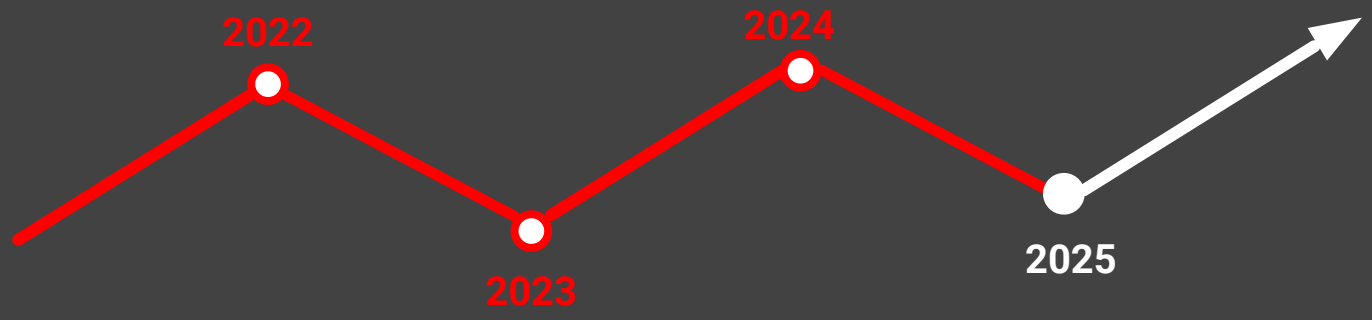
Swire Plant Production

Kyle Anderson, Kim Buesser, Grif Brown, and Katie O’Connor

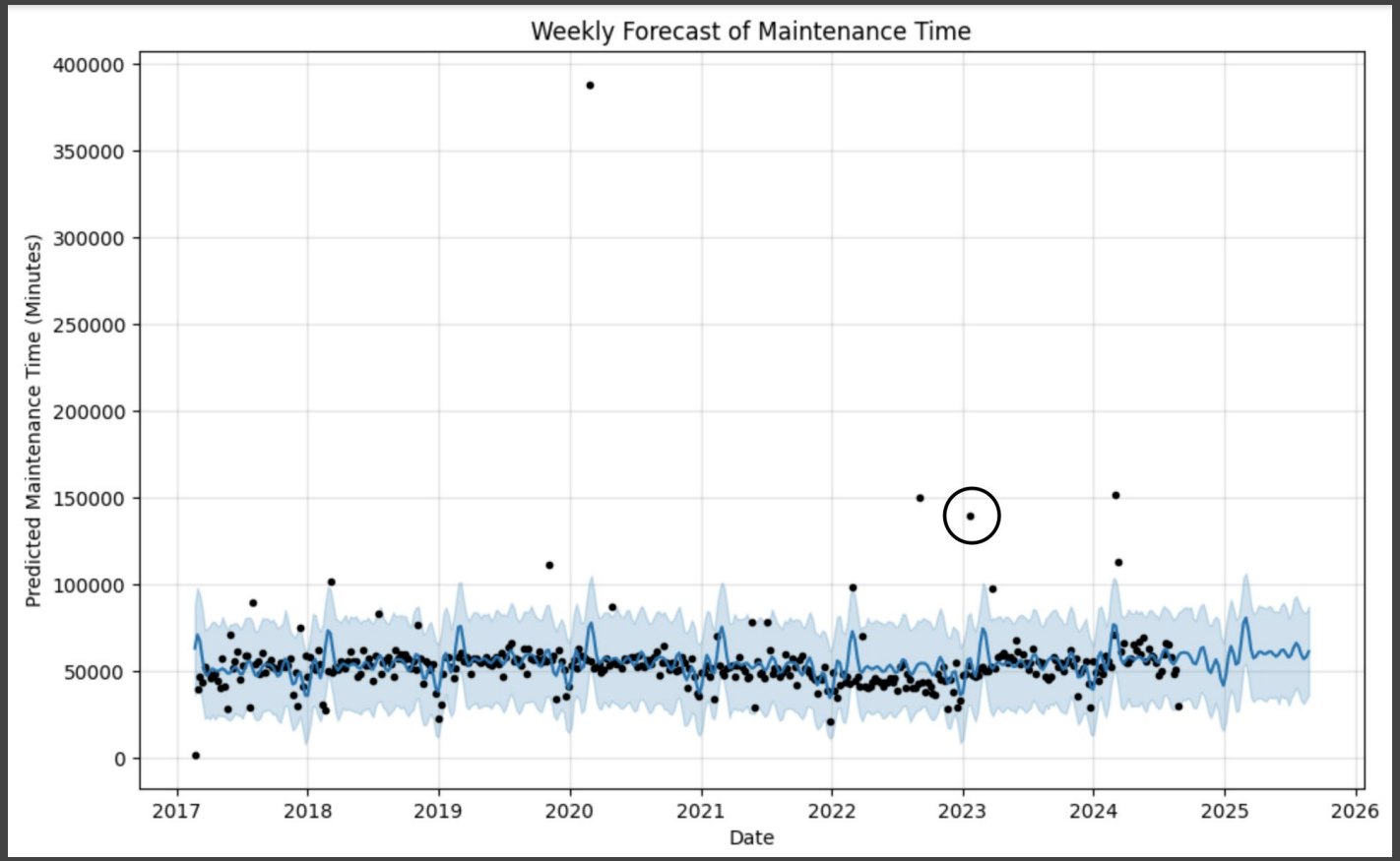
Where can we derive meaningful data insights?

Maintenance Time

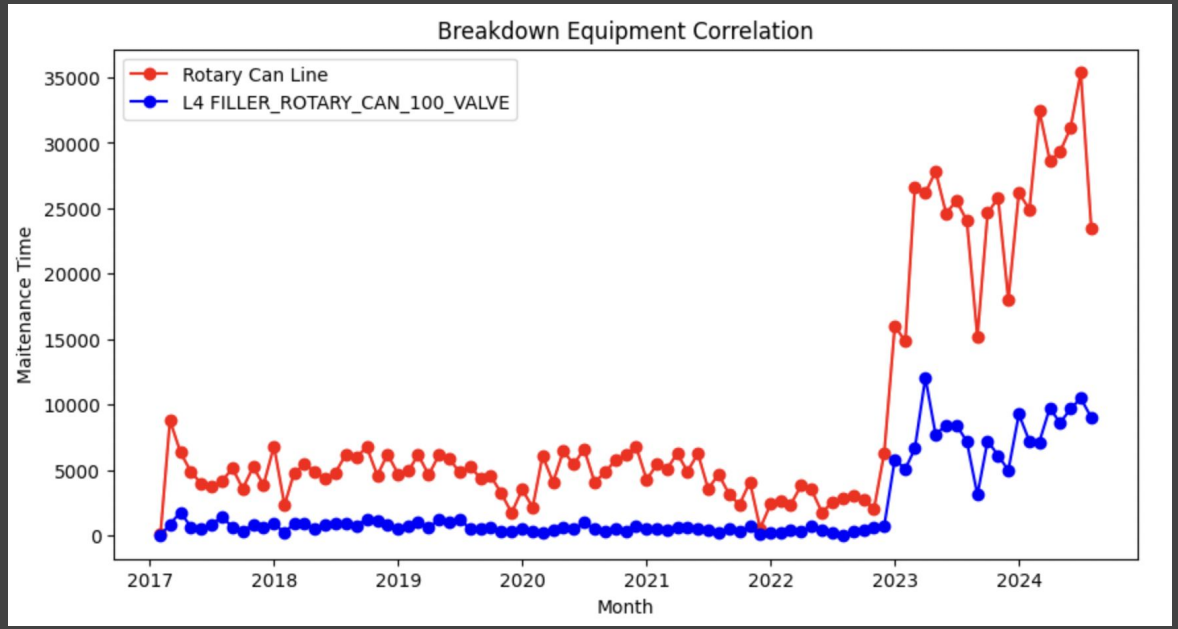


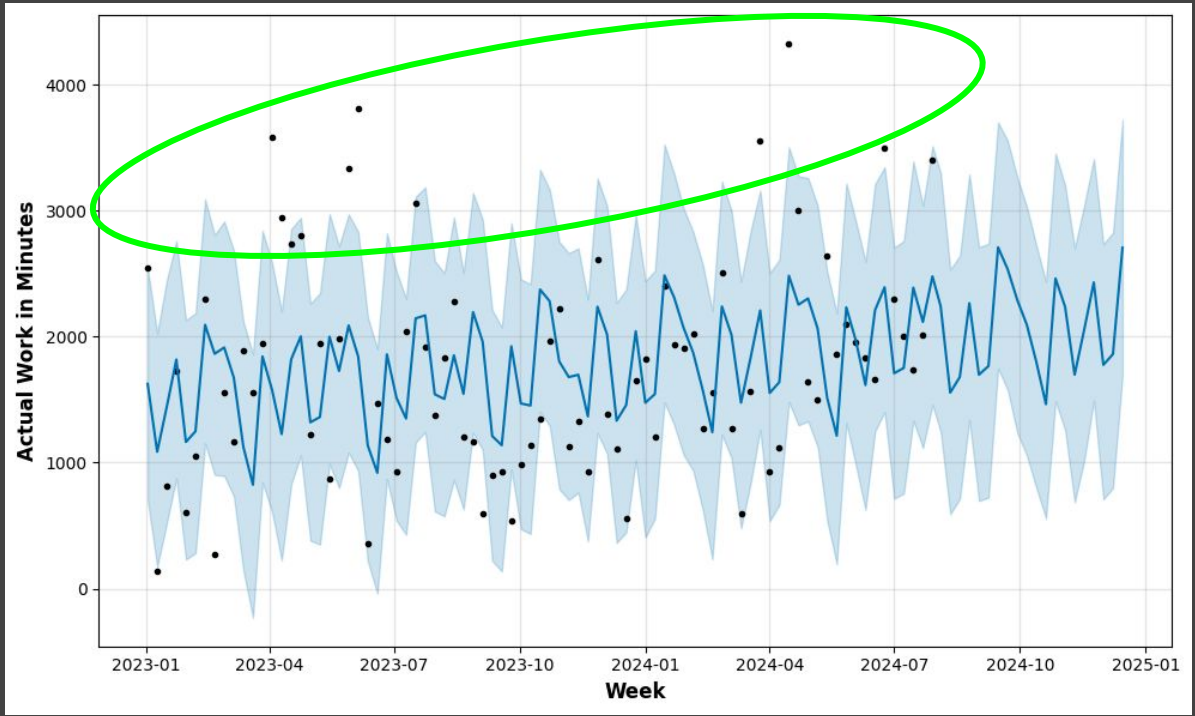
Modeling	Anomaly Detection	Time Savings
Predicting Maintenance	Extracting Insight from Outliers	Early Detection Leads to Informed Decisions

MONZA Canline



Equipment replacement most highly correlated to Canline maintenance





Anomaly Detection using a Prophet model

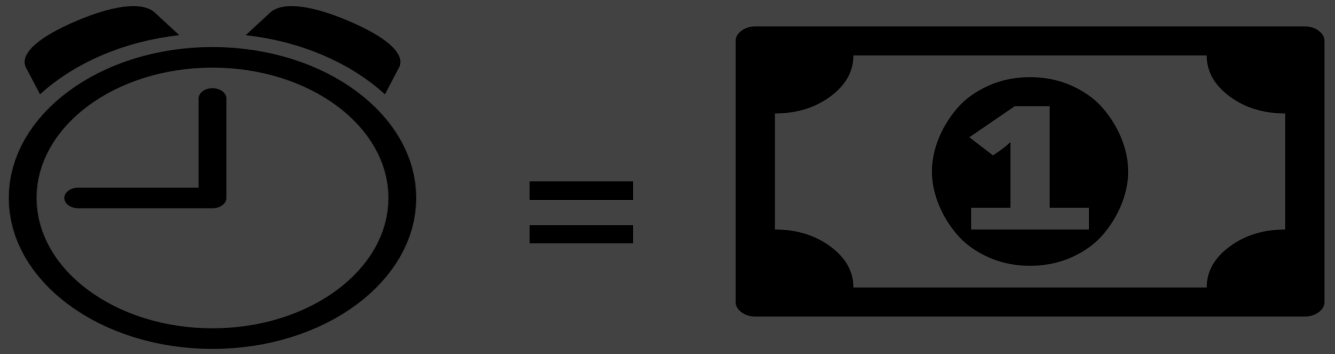
Unplanned Maintenance Takes 34% More Time on Average Than Planned Maintenance

CONFIDENCE in PROPHET

Models such as Random Forest are **limited in long term forecasting**

Whereas Prophet focuses on Maintenance as it leverages Forecasting and Seasonality Trends

LET'S LOOK AT THE RESULTS USING PROPHET



Overall Objectives

- **Find an area that is seeing an influx of minutes**

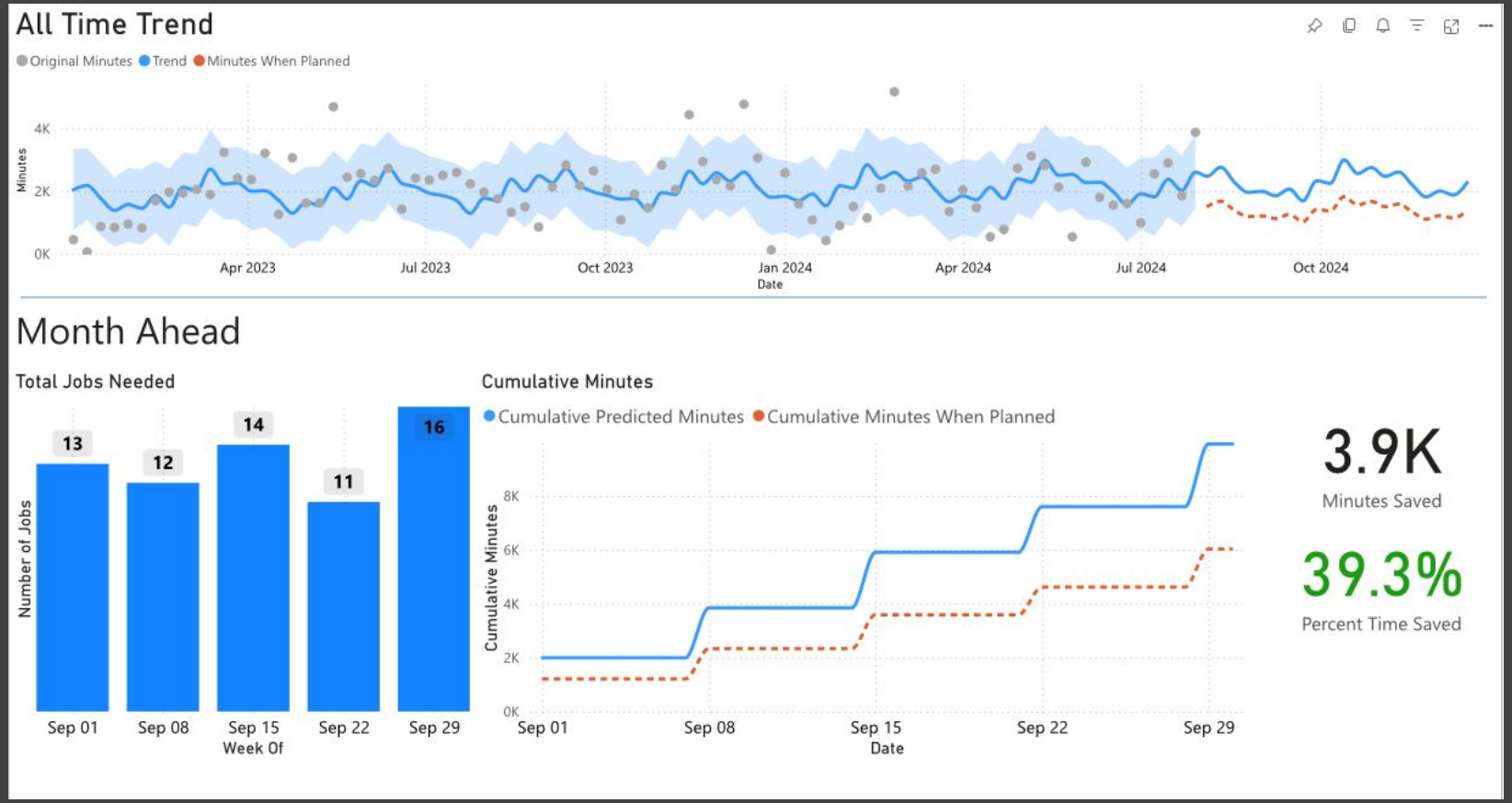
- **Determine equipment that is causing the influx**

In Return

- **Forecast minutes spent on problem equipment**

- **Plan jobs accordingly to reduce time**

Results - L4 Rotary Can



Thank you!