Enhancing Customer Satisfaction for a Leading Elevator Company Through an Improved Condition-based Maintenance System

Challenges faced

Our client, the world's largest manufacturer of vertical transportation systems, wanted to build a Condition Based Maintenance (CBM) data pipeline factory to support more than 100 countries, using sensor data to create reusable data pipelines for each country. They wanted to reduce their existing process for each country, which took over 20 weeks to complete. They were also facing issues with maintenance-related service order fulfilments.
Our solution

Spectra has been deployed on Azure Cloud and configured to ingest sensor data. Spectra also built data pipelines to normalize and prepare the data to be fed to machine learning models for predictive maintenance.

The Spectra setup leveraged Azure PaaS, and APIs enabled the inter-system integration with Azure BLOB and Azure SQL, thereby abstracting technical complexities. Reusable data pipelines were built to manage analytical requirements and reduce time and cost for onboarding a new country.

Business impact

Spectra significantly reduced the data preparation time from several weeks to just one hour. It also provided action-driven analytics for IoT-integrated diagnostics that can help large manufacturers improve fault detection and predict anomalies early.

Additionally, it offered the following benefits

- **42%** reduction in the overall execution time
- **90%** reduction in time to onboard a new country
- **80%** reusability achieved in all information assets for the solution

The Fosfor Product Suite is the only end-to-end suite for optimizing all aspects of the data-to-decisions lifecycle. Fosfor helps you make better decisions, ensuring you have the right data in more hands in the fastest time possible. The Fosfor Product Suite is made up of Spectra, a comprehensive DataOps platform; Optic, a data fabric to facilitate data discovery-to-consumption journeys; Refract, a Data Science and MLOps platform; Aspect, a no-code unstructured data processing platform; and Lumin, an augmented analytics platform. Taken together, the Fosfor suite helps businesses discover the hidden value in their data. The Fosfor Data Products Unit is part of LTI, a global technology consulting and digital solutions company with hundreds of clients and operations in 31 countries. For more information, visit Fosfor.com.