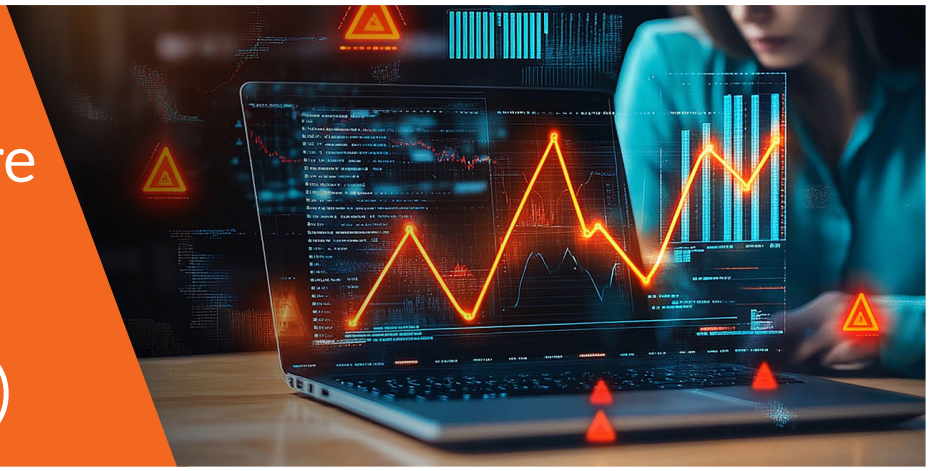
Reducing Equipment Failure Cost with Predictive Analytics (HVAC)



The Customer

A very large HVAC company (Abu Dhabi) needing to understand year-over-year equipment failure cost and forecast costs for the next 30 years, while empowering analysts/scientists with self-serve advanced analytics.

The Challenge

- Complex, time-consuming manual analytics with limited collaboration
- Hard to unify data and extract value across sources
- Difficulty scaling use cases and generating timely insights
- Need to keep customers loyal through higher reliability

The Solution

Deploy predictive cost and reliability analytics with alerting:

- Build intuitive analytical app and workflows for financial-impact forecasting
- Consolidate multisource data; engineer features; train ML models
- Provide forecasting notifications to drive proactive maintenance and allocation

The Results

- Proactive asset-risk management and cost control
- Automated analytics for repeatable use cases
- Better allocation of maintenance resources
- Improved customer experience through reliability

Impact Delivered

- 30% Reduction in failure-related costs
- 35% Fewer unplanned outages
- 40% Faster maintenance decisions
- 25% Higher customer satisfaction

Solution Components

- Data Lake
- ML Framework
- Orchestration and BI Tools