CASE STUDY

90% Faster Predictive Error Detection for a Global Tech Leader

BUSINESS CHALLENGES

A global device manufacturing company faced recurring delays in identifying and resolving product issues after software or firmware updates. These lags caused a surge in customer escalations, reduced satisfaction, and placed immense pressure on their support teams. The business needed a proactive solution to detect problems before users experienced them.

TECHNOLOGY USED

- **Machine Learning Models:** Deployed to detect complex error patterns and anomalies in real time
- **Predictive Analytics:** Enabled accurate forecasting of potential device failures before they occur
- **Automated Alerting System:** Integrated real-time notifications to technicians for proactive issue resolution

OUR SOLUTIONS

We developed an AI-powered solution capable of detecting device errors and alerting stakeholders before customers report them. To support this, we built a scalable data warehouse that consolidated error data from **over 100,000 devices**, providing a unified and centralized source of truth.

On top of this robust infrastructure, we implemented advanced machine learning models that could detect recurring error patterns, predict potential failures with high accuracy, and automatically alert technicians in real-time. This allowed the client to shift from reactive troubleshooting to proactive maintenance—minimizing downtime, reducing escalations, and improving overall product reliability.

VALUE DELIVERED

- **90% faster** identification of product quality issues—from months to weeks
- **98% improvement** in alerting technicians before customer escalations
- Strengthened customer relationships through proactive support
- Reduced escalations, improved internal efficiency, and enhanced service reputation