

SmartInsights



Challenges

Lack of Scalable Industrial IoT and ML Platform

To maintain an edge in an increasingly competitive marketplace, manufacturers need to take ownership of their data to optimize operations, create efficiencies and react in real-time to issues. Customers today face multiple challenges, including data silos, lack of AI/ML integration, complex solutions that are difficult to scale and expensive to customize, and in some cases, lack of connectivity between machines.



SmartInsights

AI Powered Industrial IoT Insights

SmartInsights is built from the ground up to help our industrial customers realize the value of data and telemetry generated by their machines. Our solutions are built on top of world-class industrial AI and IoT platforms from Amazon Web Services. We pair that with our industry leading shop floor experience and pre-trained machine learning models to translate fast-moving data into actionable insights that drive business outcomes. The entire solution is lightweight, extendable and securely connects to your existing assets with no special training necessary.

SmartInsights is a shop floor to insights solution powering the next wave of industrial process optimization. Our state-of-the-art explainable machine learning framework gives you the confidence to make impactful decisions.



Operational Efficiency

Identify the percentage of manufacturing time that is truly productive and improve manufacturing processes.



Process Optimization

Eliminate waste, improve efficiency and optimize operations. Use real-time data to improve productivity on the fly.



Predictive Maintenance

Predict complex machine failures, optimize maintenance to minimize factory downtime.



Anomaly Detection

Integrate machine learning to analyze current conditions to identify deviations from normal operating behavior.

TensorIoT on AWS

SmartInsights is an industrial IoT and ML solution that leverages AWS services in order to help customers rapidly connect their industrial machinery and sensors to the cloud, where that data can be used to improve response time to issues and drive operational efficiency, as well as unlock long-term insights. The use of services like AWS IoT SiteWise, AWS IoT Greengrass, and AWS IoT Core ensure the security and scalability of the solution, and once the data is in the cloud, it can then be integrated with a variety of AWS services to drive business value, from BI Visualizations through AWS Quicksight to Alerting through Amazon Pinpoint to Machine Learning Insights with Amazon SageMaker.

Features



Operational Efficiency and Process Optimization

SmartInsights helps the customer by identifying the percentage of manufacturing time that is truly productive and improving manufacturing processes. It also helps with eliminating waste, improving efficiency and optimizing operations, while using real-time data to improve productivity on the fly.



Actionable Intelligence Combined with AI at Edge

SmartInsights state-of-the-art, explainable AI turns data into real insights. Welcome to the world of AI-driven root cause analysis. Our solution also leverages AWS edge technologies like AWS IoT Greengrass to deliver machine learning capabilities at the edge to avoid factory outboard bandwidth usage.

Reliance Steel & Aluminum CO



Challenges

TRUMPF lasers are highly sensitive but essential machines used for cutting metal. Any downtime due to maintenance or material backlogs is extremely expensive. Reliance wanted to analyze detailed usage data to improve output.



Solution

SmartInsights provides a unified view of data across the shop floor. This allows plant managers to review data from TRUMPF as well as upstream machines. The web UI provides current status and a daily summary and forecasts to all users.



Results

The pilot implementation in the AZ plant improved output by 5% in the first month just by providing visibility and no changes to the scheduling. Reliance is now standardizing the asset model across their sites to expand the deployment.

Get started with TensorIoT solutions on AWS

Visit the APN Partner [website](#) to purchase today.