AWS IoT

Connected Factory Solution
Industrial Machine Connectivity | Deployment Expertise | Partner Solutions

Challenges
Lack of data visibility

The biggest challenges for majority of manufacturing enterprises within their plant floor is visibility into operation technology data from machines, Programmable Logic Controllers (PLCs), and SCADA systems to perform Root Cause Analysis (RCA) when a line or machine goes down, improving throughput without compromising quality, and understanding micro-stoppages of machinery in real time.

A plant floor has a disparate set of PLCs and multiple industrial protocols (300+) that make it challenging to talk to the plant floor "Things" and access data that can be leveraged for diagnostics and predictive analytics. Additionally, most customers and partners spend excessive time building connectivity to these plant floor systems. This approach is unscalable due to the multiple integration points. Customers and partners have to build additional technology components to scale this for multi-plant roll-out, to address security, and to generate multiple views of the data. Due to a lack of device integration and data visibility, manufacturers struggle to drive business outcomes and industry 4.0 initiatives never leave the Proof of Concept stage.

Connected Factory Solution
Unlock data to modernize manufacturing

A purpose-built solution from AWS and partners to unlock data from equipment, PLCs, and Historians to optimize operations, improve productivity, and increase availability. This solution includes:

1. **Connected Factory Solution Architecture,** a technical framework to ensure repeatability and is a subset of the AWS Manufacturing Reference Architecture.
2. **Industrial machine connectivity** kit with AWS qualified hardware and AWS IoT device software for ingesting, streaming data from equipment, PLCs, and historical data from historian to cloud.
3. **Deployment expertise** for rapid roll out of a fixed menu of features providing immediate outcomes and a solid foundation for Digital Innovation with AWS sharing the implementation risk, at a fixed price.
4. **Partner solutions** that optimize factor output and product quality, maximize asset utilization, and identify equipment maintenance issues.

Benefits
Democratize access to data and lay the foundation for digitizing manufacturing operations.

Organize, store, and manage data
Get data from valuable assets to AWS in a simple, structured process so that you can quickly realize the business value that is derived from that data.

Visualize near real-time operational metrics
Visibility into operation technology data to perform Root Cause Analysis (RCA) when a line or machine goes down, improve throughput without compromising quality, and better understand micro-stoppages of machinery in real time.

Enable tighter integration between OT analytics and IT systems
Gathering insights from OT systems will help streamline processes running within IT systems like SAP, Maintenance, MES, and Inventory.

Foundation for higher level solutions
This provides a scalable foundation to deploy solutions for use-cases like predictive quality and asset condition monitoring and maintenance.

Deployment expertise
Rapid deployment at scale with a fixed menu of features providing immediate outcomes and a solid foundation for Digital Innovation with AWS sharing the implementation risk at a fixed price.

Accelerate business outcomes
Advanced partner solutions that increase asset availability, increase product quality, and increase knowledge of assets, while lowering costs, reducing maintenance costs and more.

Target Segments

Industry Profile : The Connected Factory solution is for manufacturing customers including both discrete and process manufacturing and covers sub-verticals within Automotive, Aerospace, Consumer Packaged Goods, Healthcare and Lifesciences, and High-Tech manufacturing (i.e. Semiconductors).

Personas - IT Profiles : CIO, VP/Director of IT Operations, IT Manager/Director | OT Profiles : VP/Director of Manufacturing

Customer Profiles
1. Customers are primarily mid-market to enterprise entities who are already AWS customers and are seeking to leverage AWS IoT to modernize their manufacturing operations.
2. Customers who are looking to start their cloud migration journey to AWS (on-premises or another cloud) and want to use IoT workloads as a starting point in their phased cloud migration plan.

Partner Ecosystem

Get Started Offers

Mobilize for Production Offer for AWS ProServe
In 8-Weeks, for $300K statement of work, AWS ProServe will develop a production quality end to end solution and a rapid deployment template to automate deployment across lines, plants, divisions, and geos globally.

Proof of Value Offer from GSI/SI partners
In 4-Weeks, AWS partners (GSI/Sis) will develop an end to end proof of value solution for one line or a set of machines in a plant to perform RCA (root cause analysis).

Get started with Connected Factory solutions on AWS
Learn more..