

Modernizing Industrial technologies & processes. Increasing efficiency and reducing costs with process automation through IIoT Solutions.

Adopting Industry 4.0 comes with some challenges. Investment in replacing and installing machines to ensure they are cloud enabled, technical skills required to implement solutions from hardware engineering to cloud enabling existing stations and equipment, application development to make use of data coming from devices to control equipment in the factory, data engineering to ensure data received from devices provides the right attributes for powering applications, and data science to work with predictive solutions, form a set of requirements that are crucial to a successful Industry 4.0 strategy.

Through a collaborative process in identifying how to best optimize manufacturing processes and operations, Onica will work with you to develop a MVP to prove business value and after validation, we will help your team deploy an effective production solution.

aws partner network

Premier
Consulting Partner

IoT Competency

Data & Analytics Competency

Machine Learning Competency

Migration Competency

Industrial Software Competency

Benefits



Connected Equipment & Workstations

Capture telemetry & performance data on new or existing equipment and workstations



Secure Remote Operations

Command and control devices on the factory floor from a mobile or web application



Centralized Dashboard

Single pane of glass to view operational health of all your workstations and receive real-time notifications of failures and fault codes



Enable Predictive Maintenance

Gain intelligence through running analysis on equipment data to enable predictive maintenance and performance optimization

About Onica

Manufacturing organizations have found creative and compelling ways to adopt the cloud for business success. In a race to meet the ever changing demands of their customers, manufacturing organizations are leveraging the cloud to enhance their operations and improve worker safety with smart factories, safety monitoring, ERP, and MRP migrations. Onica works closely with our clients to help them innovate, reduce costs, gain deeper visibility, and move faster in a highly disruptive and competitive marketplace.

With the AWS Industrial Software Consulting competency and 13 others including IoT, Data & Analytics, DevOps, and Migration, Onica specializes in developing predictive solutions and modernizing mission critical applications, crucial for optimizing industrial operations. Gain efficiencies through supply chain optimization, process automation and predictive maintenance with the help of Onica's AWS certified industrial solutions experts.

How it Works

Through a custom engagement Onica will determine which solutions will help you meet your business goals:

- ✓ IoT enable workstations & equipment allowing data extraction + pipeline to AWS
- ✓ Custom application development for greenfield industrial software
- ✓ Data Engineering & Data Science for predictive maintenance & predictive failure solutions

Key Activities

Detailed Discovery

Onica will work with stake-holders on what your business is looking to achieve with Data Driven Manufacturing & Virtual Andon. We'll do a solution ideation session to gather requirements and determine which set of technologies from hardware engineering to data science, will be needed for a successful MVP.

Cloud Software

In parallel with hardware development, Onica will configure IoT device connectivity and build cloud data capture, correlation and presentation elements. These components will be subject to refinement as data capture begins and the relative importance of values is established.

Application & Dashboard

We'll work with you on application features, data visualization, alarms, notifications and device controls all in a seamless user-friendly web or mobile interface.

Board and Integration R&D

Onica will use the data from detailed discovery to select or design the IoT controller board and sensor integration, firmware, caching, connectivity, power interface and enclosure.

On Site Installation & Validation

Onica will deliver the developed components on site and assist with installation of sensors and controllers and validation of the data produced by the solution.

Analytics & Data Science

Depending on what you're looking to achieve with the device data, our data scientists will work with you on developing predictive & forecasting models for process optimization & predictive maintenance.

Customer Success

Case Study: Local Root Farms

The customer: Local Roots Farms designs, manufactures and operates high tech, vertical, indoor farming solutions, to support greater food accessibility, quality, sustainability, and global health. The company approached Onica looking to build an automated IoT solution for remote farm management.

What we did: Onica developed a solution that uses automation to coordinate the communication of farm environments and remotely control environmental factors such as temperature, CO2, water, and light. A pipeline was created to collect and process data from sensors and then feed it to Local Roots Farms' web and mobile apps, where horticulturalists could remotely control the farming environments.

The Outcome: By utilizing IoT based smart management, Local Roots Farms now has consistent control of the environment, achieving higher yields while minimizing power and water requirements. The solution eliminates the need for manual input, allowing individual employees to manage multiple farms on their own.

Case Study: Cerapedics

The customer: Cerapedics is a medical device company from Colorado that makes bone graft technology for patients with spinal issues. Cerapedics approached Onica, looking to modernize and automate their production process to track large amounts of data in real-time and improve cost-effectiveness, efficiency and analytics.

What we did: Onica crafted a PoC IoT solution that connected digital and analog sensors on the sterilizer, extracted data, and sent it to the AWS cloud for display. An optimal data model was defined, and a data ingestion, enrichment and storage pipeline was built for real-time and historical analysis that is scalable, cost-effective and resilient to outages.

The Outcome: By transitioning to a smart factory to utilize real-time data and insights, Onica helped Cerapedics enable predictive analytics and maintenance so that they could improve the yield of their manufacturing batches and minimize production losses.