Realize the unlimited potential of remote monitoring with IoT
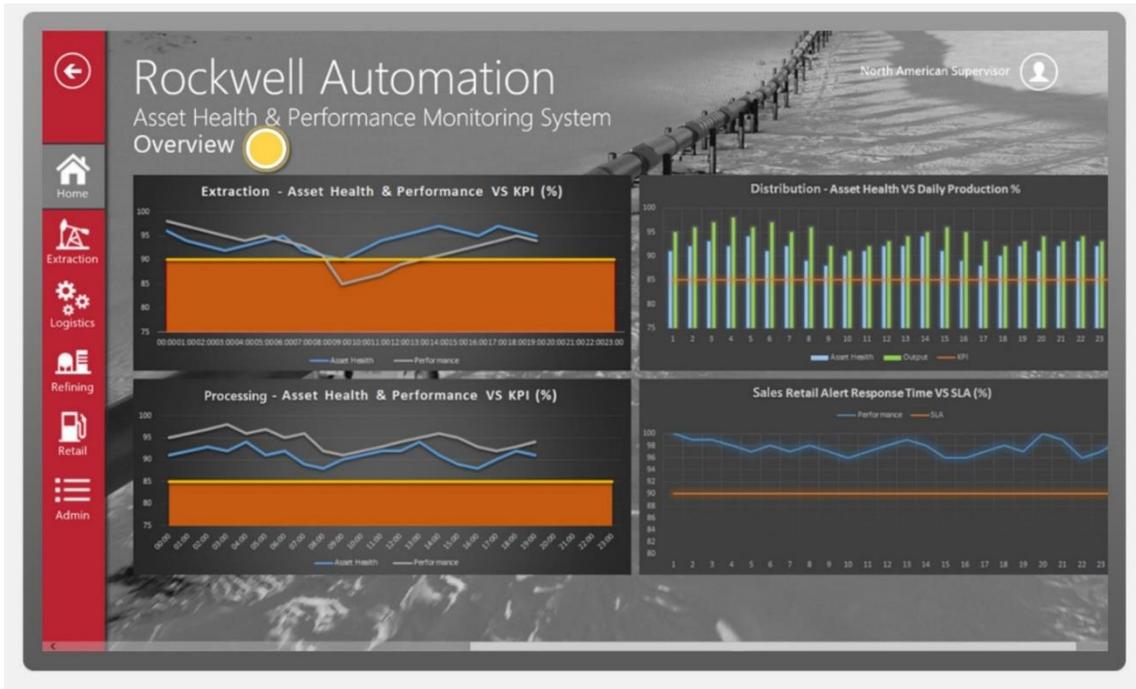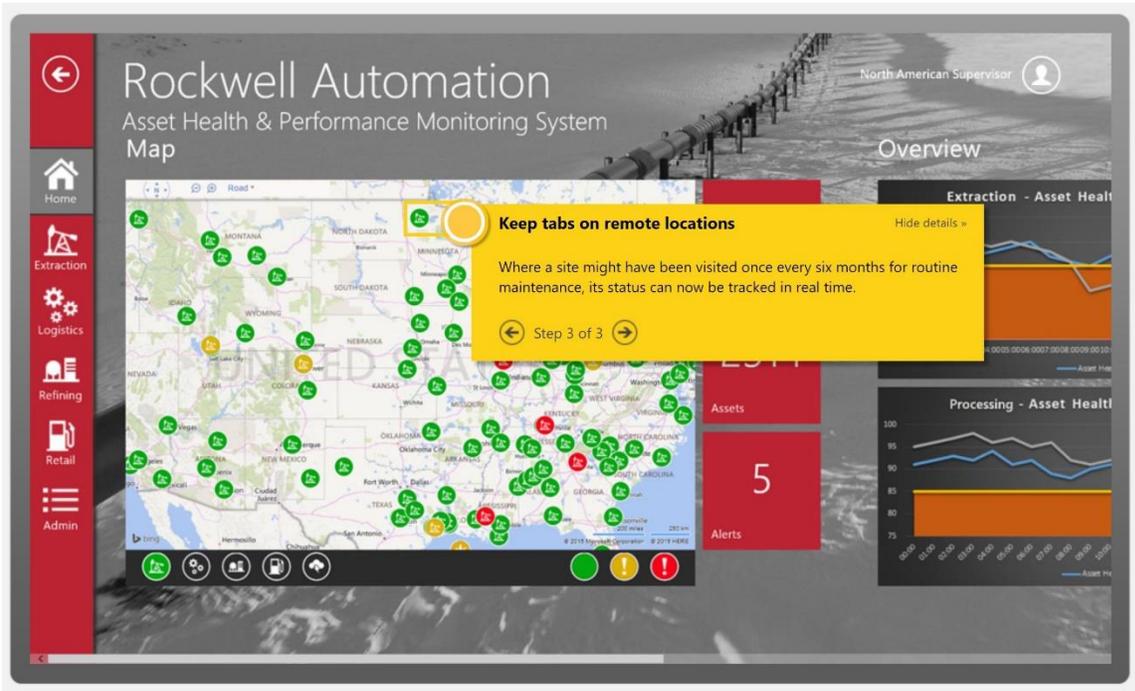
Automation Demo

The following demo is an example of how Rockwell Automation have built an integrated portal platform to transform their business. With many of their assets in remote locations it was previously very difficult and time consuming to monitor this equipment, let alone understand its performance. By connecting them to Microsoft Azure, Rockwell Automation can now see real time asset health and performance information, monitor service windows and carry out preemptive maintenance on parts and equipment before an incident occurs.

The previously untapped wealth of data allows Rockwell Automation to analyze specific parts to determine service life or fine-tune optimal performance; transforming the way they, and their customers, do business. These cloud services open up a variety of new business possibilities. For example, the equipment involved in mining, moving, refining, and selling petroleum is expensive and rugged, and comes from hundreds of manufacturers.
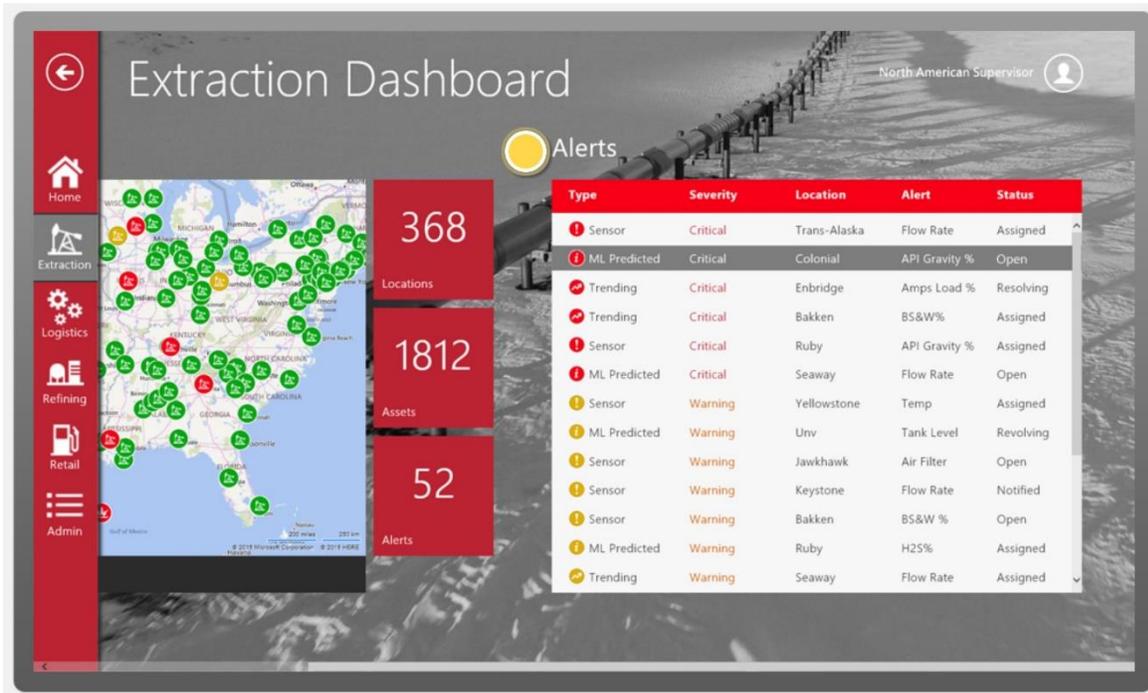
Enhanced by the Internet of Things (IoT), Rockwell Automation is extending its systems that monitor these valuable capital assets and use that data for predictive and even preventive maintenance. The solutions have the potential to transform the petroleum supply chain and produce bottom-line results in global productivity that could ultimately pay off at the pump.
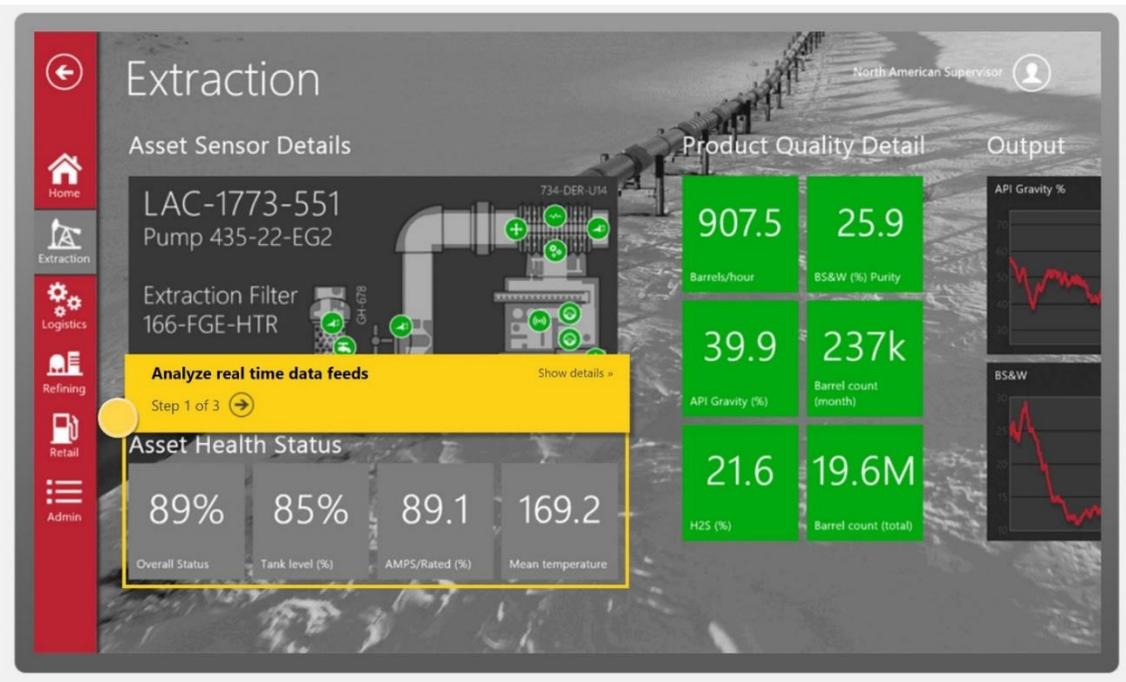
Assets Health & Performance Monitoring System

Geo Location: Assets Health & Performance Alerts System

Alerts Table: View Items by Table as Well As Map Display

Alerts Extraction, Quality and Output Display in Realtime

Assets Sensor Details: Issue description and possible solutions.

About IoT (Internet of Things)

IoT (Internet of Things) allows you to have devices on the network edge (basic Sensors, Intelligent devices, plant floor things, back office things, supply chain things, etc.), that provide you data into storage (tables storage, blob storage, SQL databases, NoSQL databases, big data databases, external storage, etc.), that you understand, apply rules, models and more (queueing, stream with analytics, command and control, etc.), that enable you to change your business (machine learning, predictive maintenance, make data analytics, reports with Power BI, etc.).

You have devices on the network edge...

Basic Sensors   Intelligent Devices

Plant Floor Things   Back Office Things   Supply Chain Things

that provide you data...

Table Storage

Blob Storage

SQL Databases

DocumentDB

External Storage

that you understand, apply rules, models and more...

Event Hubs (Service Bus)

Command and Control

that enable you to change your business...

Machine Learning   Predictive Maintenance

HDInsight   Office 365   Power BI

Command and Control

Azure IoT Solutions

Azure IoT solution is easy to provision, use and manage, you pay as you go, scale as you need, you can global reach, hyper scale and have an end to end security & privacy. The Azure IoT solution was designed to deal with the IoT challenges, such as connecting reliably and securely millions of devices to the solution backend, often embedded systems with no human operator, may only be reachable through the solution back end, may have limited power and processing resources, may have slow, or expensive network connectivity, using proprietary, custom, or industry-specific protocols, large set of popular hardware and software platforms, and can be deployed in remote locations, where physical access is expensive.
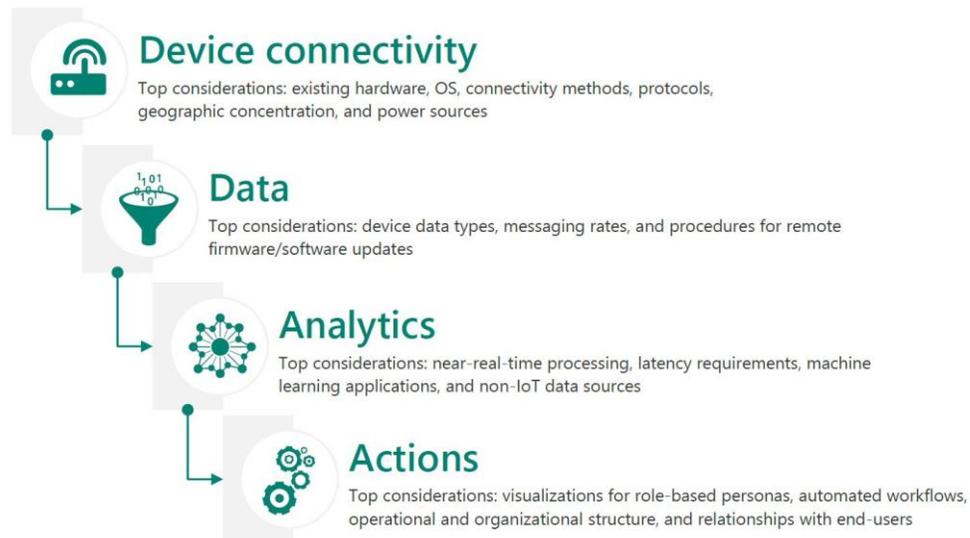
Neway's IoT Services

IoT Solution Architecture & Design
Data Collection & migration to the Azure Cloud
Cloud administration & enablement
IoT Hub Connect, monitor, and control billions of IoT assets
Smart devices connectivity and analyses
Data visualization and extraction- Making data useful and clear to view
Stream Analytics Real time data- streaming processes from millions of IoT devices
Machine Learning- Open and elastic AI development
Artificial Intelligence AI
Time Series Insights- Instantly explore and analyze time series data
Azure Location Based Services- Simple and secure location APIs provide geospatial context to data
Event Grid- Get reliable event delivery at massive scale
Apps Automation access- and use of data across clouds without writing code
IoT Devices Integration -Azure Logic Apps ,Salesforce, ServiceNow

Getting Started

A proof of concept is an instrumental step in a company's IoT journey. It allows organizational leaders to take real action on their business visions, by testing and refining the most important characteristics of a solution. It is where a company may begin to see firsthand the value and transformative power that the Internet of Things. From unlocking opportunities to utilizing existing data into new business opportunities

At Neway, we want you to feel empowered to make the best decisions in your IoT journey. If you have further questions about developing your own IoT solution, please reach out to us to learn more about how our services and our partnership with Microsoft can help your business realize on the incredible potential of the Internet of Things.

Device connectivity
Top considerations: existing hardware, OS, connectivity methods, protocols, geographic concentration, and power sources

Data
Top considerations: device data types, messaging rates, and procedures for remote firmware/software updates

Analytics
Top considerations: near-real-time processing, latency requirements, machine learning applications, and non-IoT data sources

Actions
Top considerations: visualizations for role-based personas, automated workflows, operational and organizational structure, and relationships with end-users

Learn more

• Connect with us:

Israel Offices:

Israeli offices +972 (73) 282-1774 info@neway.co.il Shimshon St 5, Petah Tikva, Israel
info@neway.co.il

US Offices: New-York offices +1 (201) 557-9310 363 7th Avenue, 18th Floor, New York, NY 10001

info@neway-technologies.com

• Learn more about the Internet of Things at the Microsoft IoT blog.