

Building Sustainable Industrial Systems And A Better Future



Today's Speakers



Don Pearson

Chief Strategy Officer
Inductive Automation



Sam Russem

Vice President of
Business
Development
Kanoa



Esteban De la Torre

Director of Sales
Engineering
ASE Global

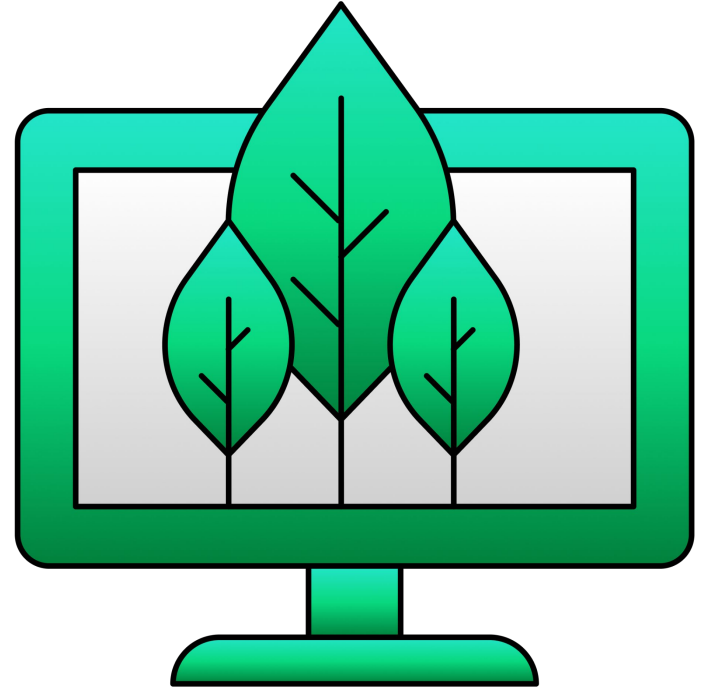


Chris Monchinski

Chief Technology
Officer
InflexionPoint

Agenda

- Introductions
- Sustainability in Manufacturing
- Kanoa: Driving Efficiency and Visibility at rPlanet Earth
- ASE Global: Edge-To-Cloud Architecture Acquires Real-Time Data From Remote Oil & Gas Facilities
- InflexionPoint: Smart Manufacturing - Considering The Whole Lifecycle
- Q&A



About Inductive Automation



Johnson & Johnson



Chobani

65%
of Fortune 100

4k+
Registered
Integrators

140+
Countries

22+
Years In The
Industry

DFW

FUJIFILM



Crate&Barrel



■ BASF

Introducing Ignition

Connect, Design, and Deploy Without Limits

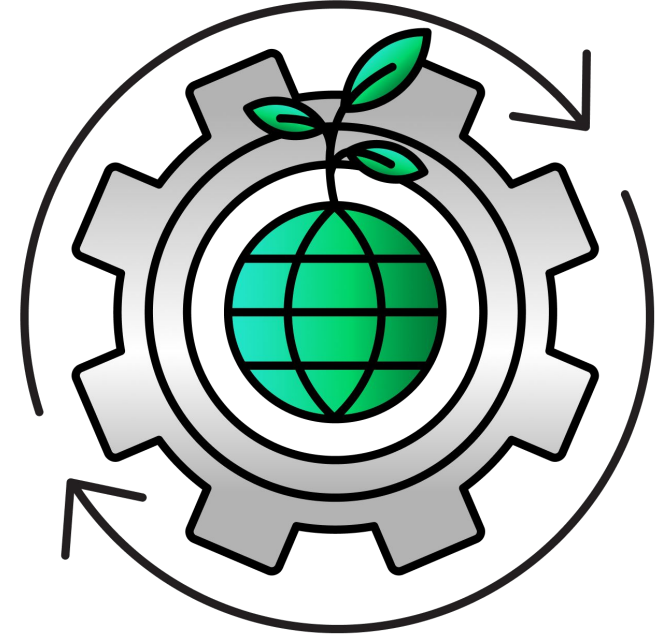
- One central hub for the plant floor and beyond
- Build any kind of industrial application
- Web-deploy to desktops, industrial displays & mobile devices
- Unlimited licensing
- Cross-platform compatibility
- Industrial-strength security & stability



**The Unlimited Platform For
SCADA And So Much More**

Sustainability In Manufacturing

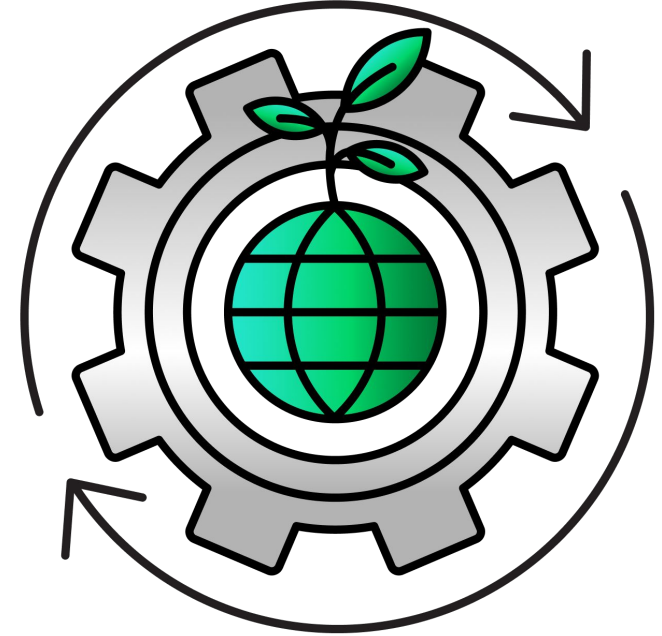
- Improving sustainability is one of the most critical actions to safeguard our future.
- Conserving resources reduces waste, helps the environment, and leaves behind a better world for future generations.
- But sustainability can be challenging, because changing existing processes can be expensive and disruptive.



Sustainability In Manufacturing

Ways to make processes more sustainable:

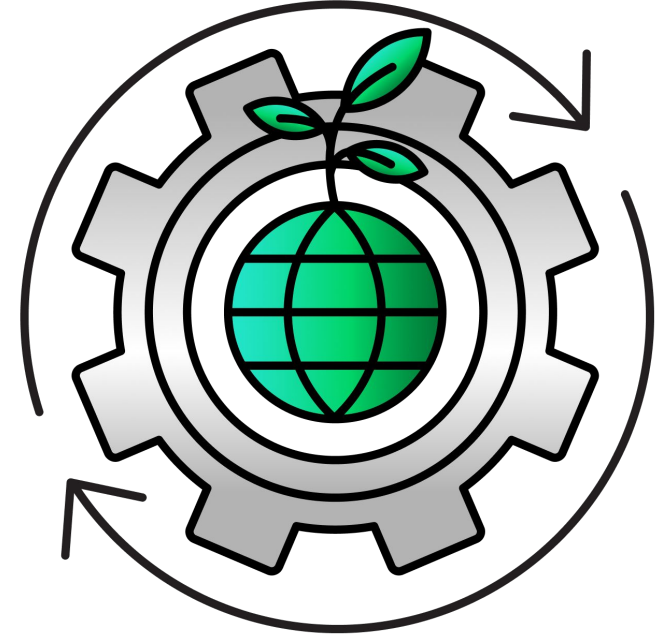
- Do more with data
- Make processes more efficient
- Reduce waste
- Reduce use of paper
- Energy monitoring



Sustainability In Manufacturing

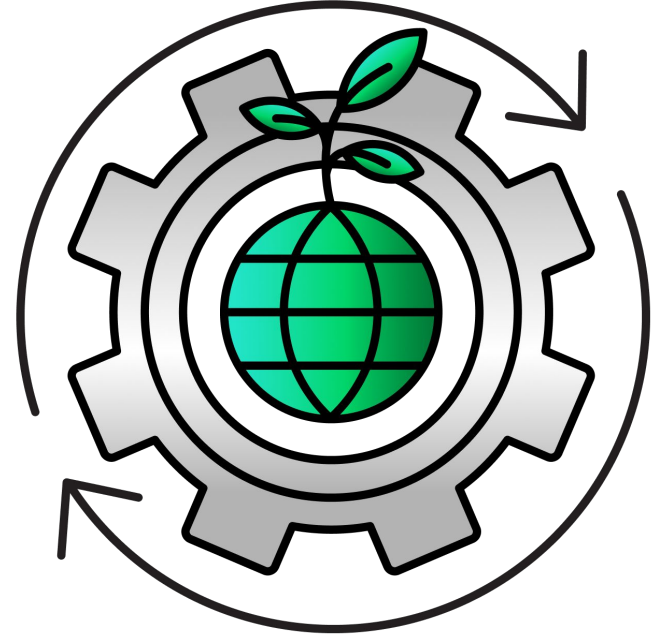
Key benefits of sustainable practices:

- More streamlined processes
- Lower energy costs
- Less negative impact on the environment
- Greater profits due to less wasted material



Sustainability In Manufacturing

Let's explore how three innovative companies are using Ignition's unique features in their quest for sustainability.



Kanoa / rPlanet Earth

The End User:

- Fully integrated recycling and packaging plant in Vernon, California
- Directly transforms post-consumer PET into FDA-approved packaging products
- Consolidated processes drastically reduce greenhouse gas emissions: 22% fewer than conventional rPET and 60% fewer than virgin PET



Kanoa / rPlanet Earth

Their overarching mission of sustainability pushes them to continuously innovate and enhance the efficiency of their operations.

However, they had some problems to solve:

- Manual systems (paper logs and Excel spreadsheets)
- Zero visibility (no real-time insight, walking the floor)



Kanoa / rPlanet Earth



Because of this, rPlanet Earth partnered with Kanoa to implement Kanoa MES: a modular, composable MES built specifically for Ignition

Kanoa / rPlanet Earth

Solution Requirements:

- Seamlessly connect to real-time equipment data
- Provide user-friendly interfaces for manual input
- Automate data processing and visualization
- Eliminate redundant entry and support better decision-making



Kanoa / rPlanet Earth

The Solution: A Central
Data Platform With
Kanoa & Ignition

Phase 1: Kanoa Ops



Manage, organize, control, and analyze all of the day-to-day work at your factory. Understand how your plant is performing and where to focus continuous improvement efforts.

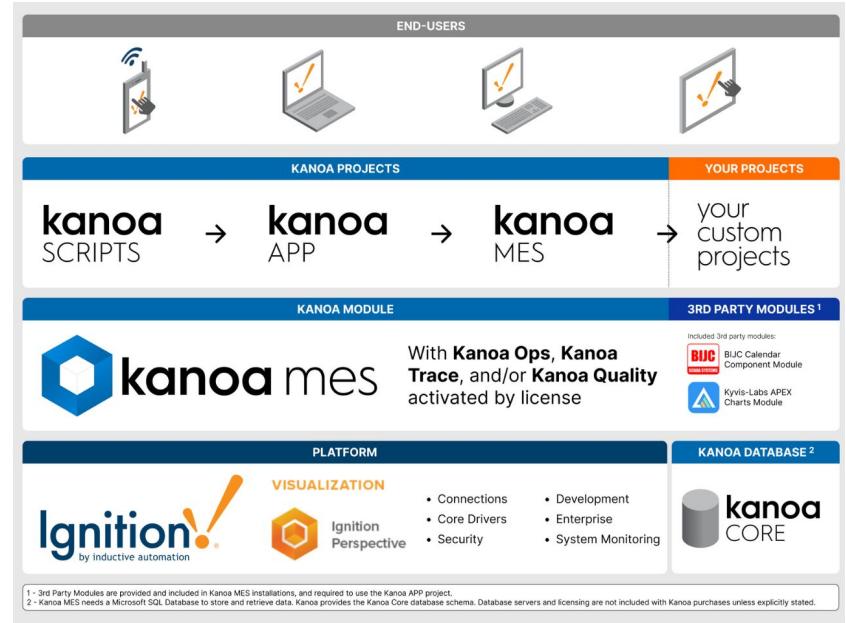


- OEE & Downtime Analysis
- Production Scheduling
- Work Order Management
- Shift Scheduling
- Asset Management
- Material Management

Kanoa / rPlanet Earth

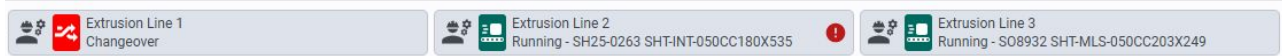
The Solution: A Central Data Platform With Kanoa & Ignition

- Kanoa Core & Kanoa Ops provided a foundation for centralized operations management
- Ignition provided robust PLC & ERP integration, mobile-responsive screens, and real-time communication
- Kanoa Ops acted as central hub for production data



Kanoa / rPlanet Earth

Pilot Program:



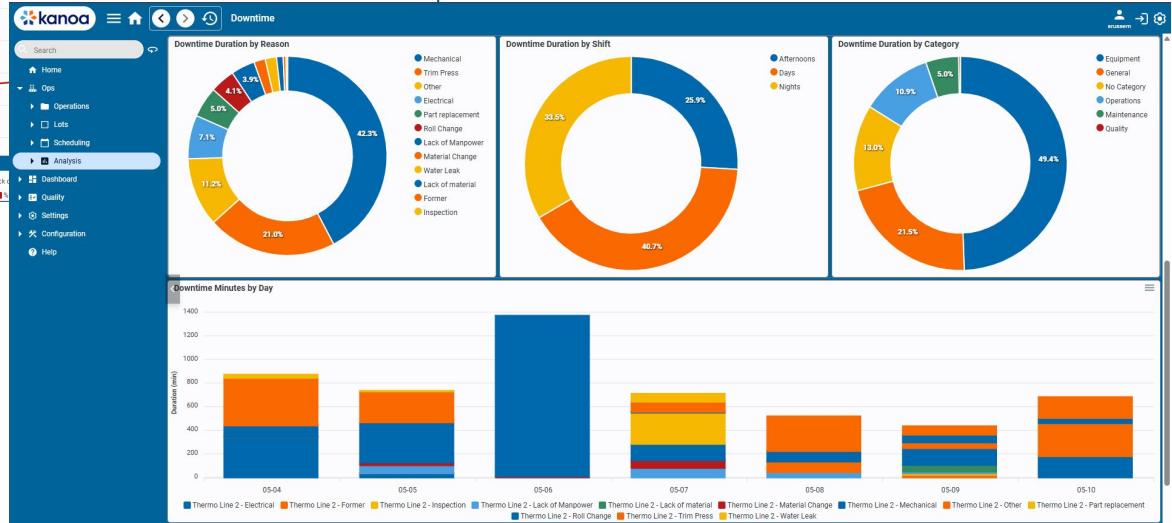
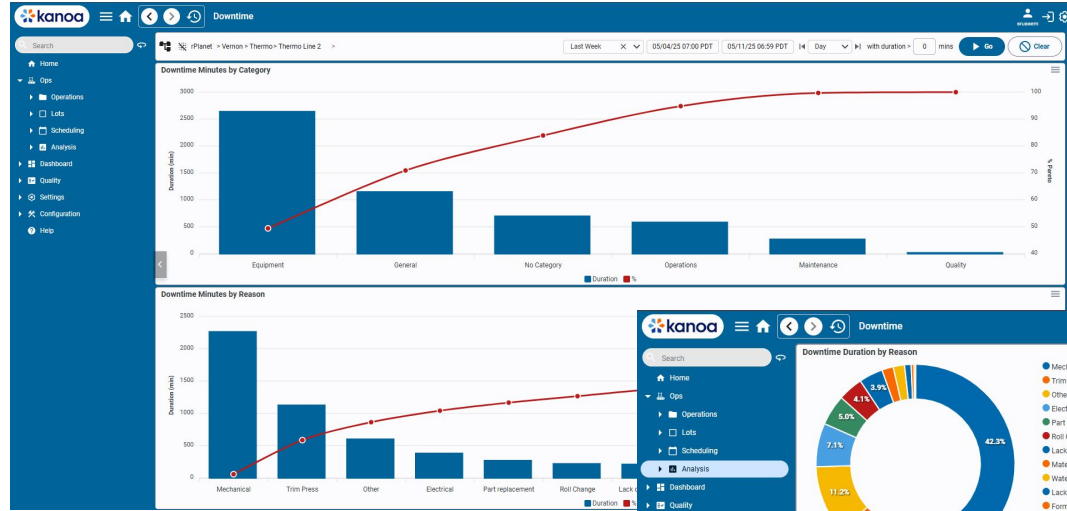
- The rollout began with a focused proof-of-concept on three extrusion lines
 - Lines had some machine connectivity, allowing for automated data collection.
 - The team helped Kanoa identify opportunities to streamline or automate their processes.
 - Improving data accuracy and timeliness in extrusion would have downstream effects. An ideal environment to validate the system's value and lay the foundation for broader adoption.

Kanoa / rPlanet Earth

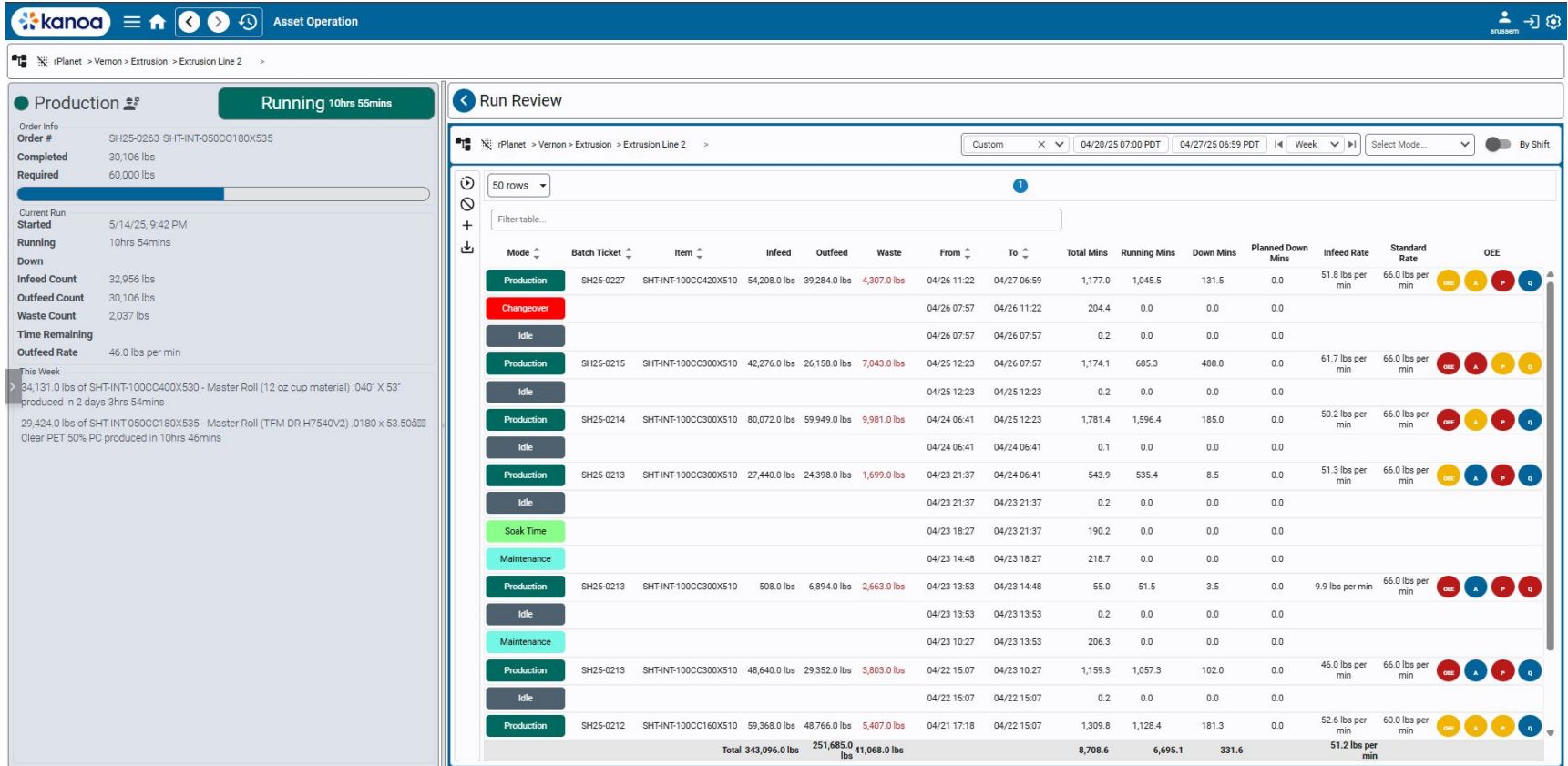
Pilot Program:

- Pilot deployment of Kanoa Ops enabled rPlanet Earth to:
 - Monitor each line's state, work order, item, and performance in real time
 - Initiate and close production runs
 - Automatically log infeed material from 4 feeders
 - Manually log produced rolls and scrap
 - Track and validate downtime events
 - Generate end-of-shift and batch reports for ERP integration

Kanoa / rPlanet Earth



Kanoa / rPlanet Earth



Kanoa / rPlanet Earth

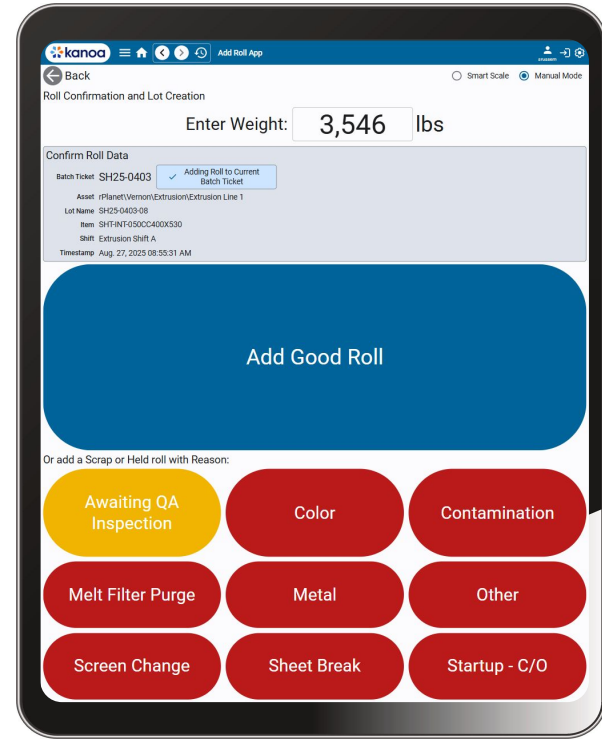
Smart Scale Project:

- A direct response to extrusion line inefficiencies
- Fully integrated Smart Scale using off-the-shelf, hardware-agnostic components connected to Ignition and Kanoa MES, and included:
 - A network-connected smart scale
 - A Samsung Android tablet running Ignition Perspective
 - A Zebra label printer that prints QR-coded labels in real time

Kanoa / rPlanet Earth

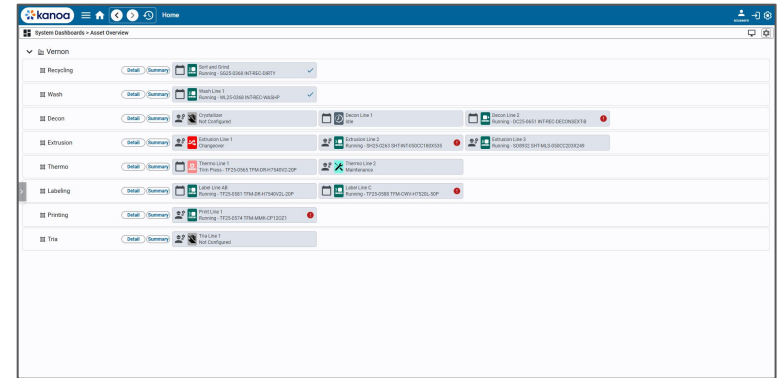
This enhanced workflow:

- Eliminated all manual data entry
- Created a real-time data pipeline from scale to MES to ERP
- Reduced errors and lag time
- Enabled better visibility and responsiveness from both operators and management
- Not just using Kanoa MES for reporting but as a platform for operational innovation & continuous improvement



Kanoa / rPlanet Earth

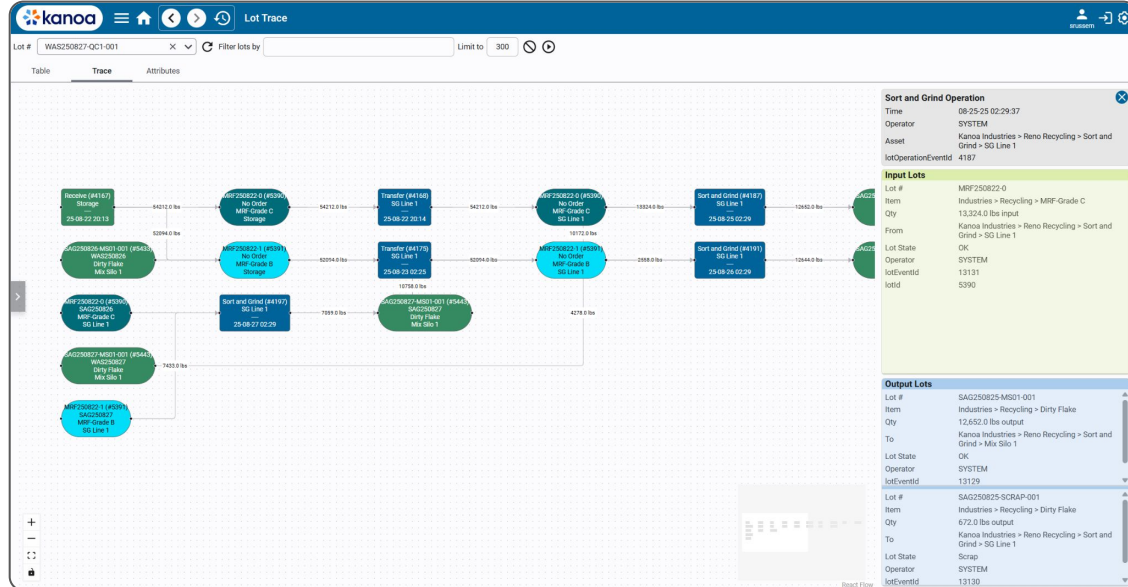
- After the pilot's success, Kanoa MES was expanded to 14 lines across the plant
- Key Results:
 - 18% increase in inventory accuracy
 - Standardized operations across 14 production lines
 - Real-time plant visibility via universal dashboards
 - Reduced admin overhead, enabling focus on process improvements



Kanoa / rPlanet Earth

Future Enhancements:

- Kanoa Quality will integrate quality checks directly into the manufacturing workflow by leveraging real-time data from Kanoa Ops.
- Kanoa Trace will establish full end-to-end material traceability across the plant.



ASE Global / Smart Energy Applications

The End User

- Develops innovative and disruptive energy solutions for the decarbonization and energy transition of the oil and gas industry
- Gas to Grid in a Box (G2G_B) solutions to produce energy using the gas associated with the crude oil extraction process



ASE Global / Smart Energy Applications

The Problem:

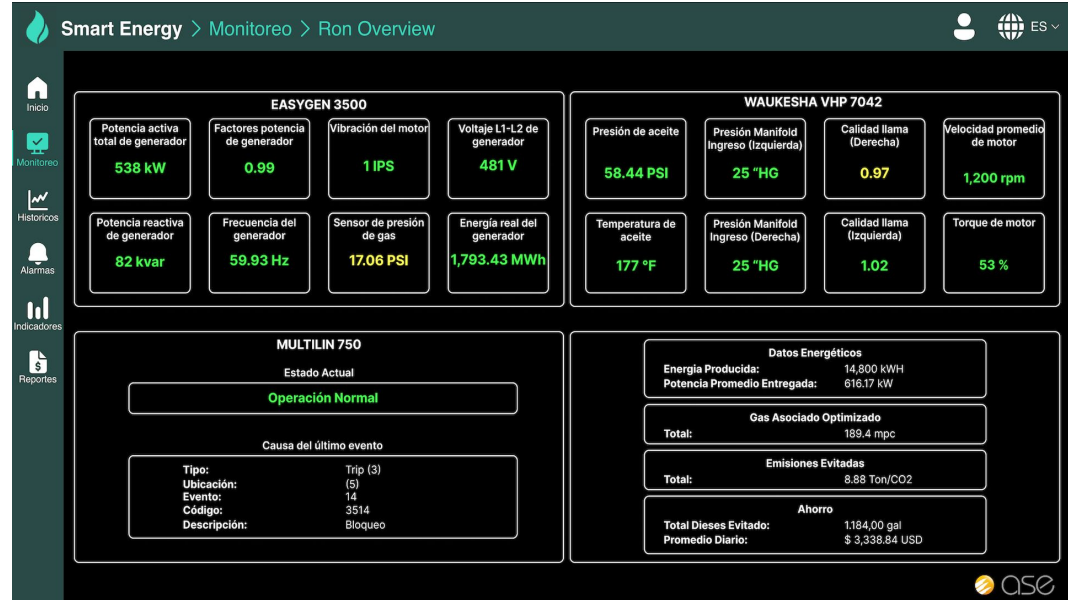
- Generators are in remote facilities that are hard to reach and have no permanent staff and no continuous monitoring
- Operators had to visit each facility every day to collect data manually
- KPIs and reports could only be collected directly from equipment displays



ASE Global / Smart Energy Applications

Solution:

- Hybrid architecture using Ignition Edge IIoT and Ignition Cloud Edition in Azure
- Each G2G_B system requires one Ignition Edge installation



ASE Global / Smart Energy Applications

Solution:

- Historical storage: Azure Database for MySQL and Ignition Cloud Edition subscription using Azure
- Application interface designed in Figma and developed using the Perspective Module in Ignition Cloud Edition



ASE Global / Smart Energy Applications

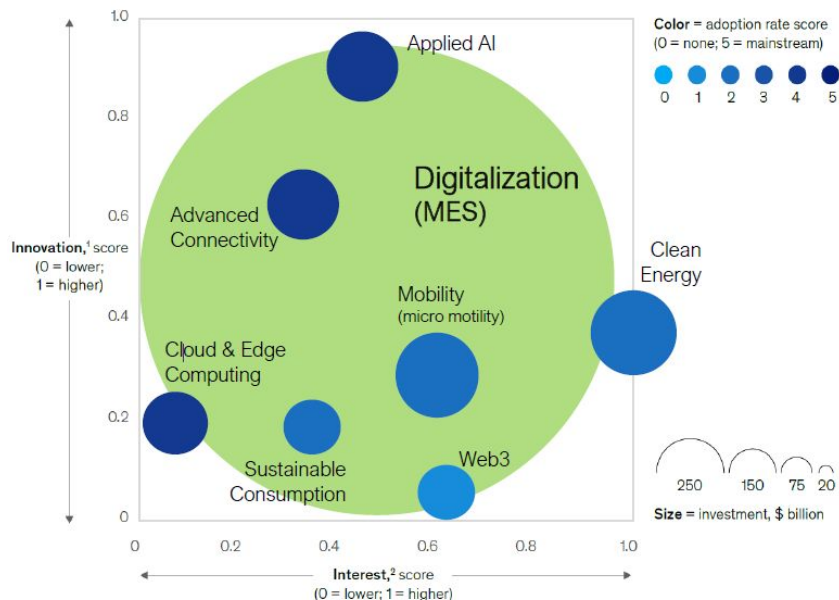
Results:

- Manual data collection replaced with an automated system
- Meets cybersecurity requirements
- Can store and forward data
- Perspective-built dynamic application facilitates future integration of new systems
- Online KPIs and automatic reporting for managers and partners
- Optimized significant time, resources, and personnel



Smart Manufacturing – Considering the Whole Lifecycle

Top Technology Trends



Derived from "McKinsey Technology Trends Outlook 2022"

Convergence of Smart Manufacturing and Sustainability

Advanced Connectivity

Higher Internet Reliability; Wider Global Coverage (5g/6g & low-earth-orbit satellites); More access and scaling; IIOT, digitalization and sustainability; democratization of technology and social benefits

Applied/Green AI

More realistic benefits than hype (simplification); enhanced automation; improved quality & waster education; GHG emissions reduction (better data to act upon); impact on social matters & ethics...

Cloud & Edge Computing

More maturity; critical to scaling & growth; leveraging advanced connectivity (and AI); improve safety & quality (reduce waste) using IIOT; driving digitalization; lower cost (social)...



Smart Manufacturing – Sustainable Use Cases

From Cow to Cash - Profitable Renewable Resources

At each RNG Sites

A true smart manufacturing effort with multiple technical disciplines

Infrastructure and Cyber to ensure safe and secure operations and remote access for operations

Automation for Safety and Control, Local Supervisory Systems

Manufacturing Intelligence for robust data collection

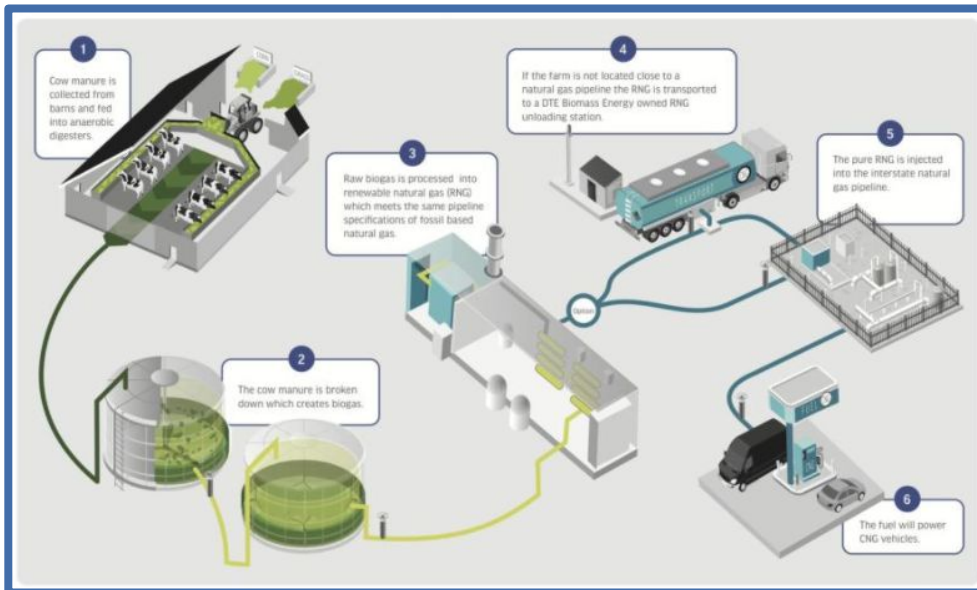
24x7 Support for operations teams, remote monitoring and ticketing

Fully Deployed

50 Sites throughout North America
Local Control and autonomous operations
Centralized monitoring for security and data collection

RNG Farm Sites

“Mini Manufacturing Sites built on Farms”
“Creating Renewable Natural Gas”



What Makes Is “Smart”

Application of data governance and unified name space across all applications to simplify integration
Active monitoring for cyber security

Financial Viability

CARB Credits

Requires exacting accuracy and accountability of data that supports manufacturing.

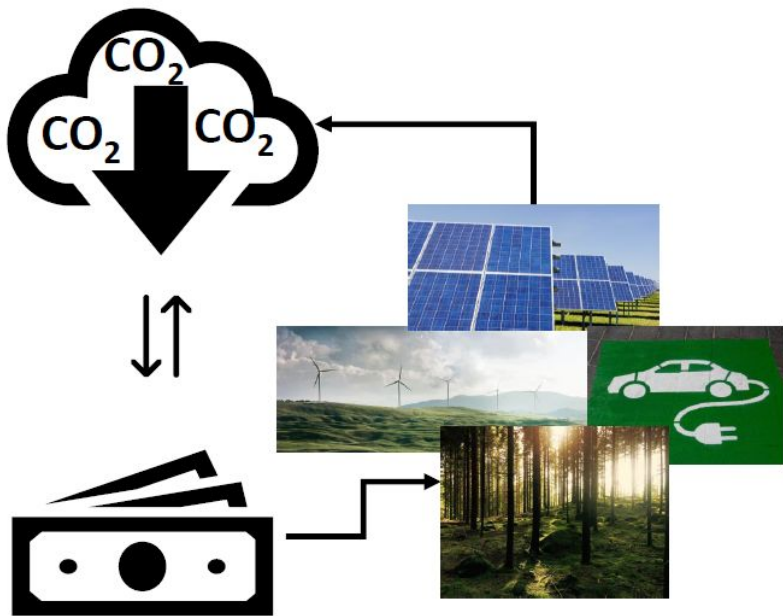
Full visibility to all sites
Secure and fault tolerant data collection

Enterprise SCADA system acquires from all vendor systems and devices that enables gas compliance and receipt of credits.



Smart Manufacturing – Sustainable Use Cases

What Makes this Possible? Carbon Offsets/Credits & Pricing



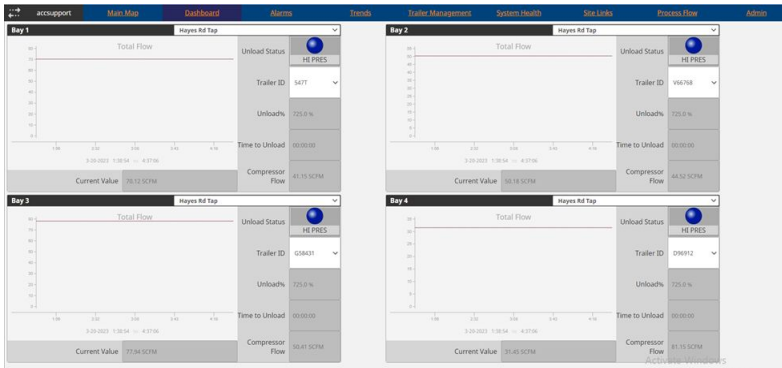
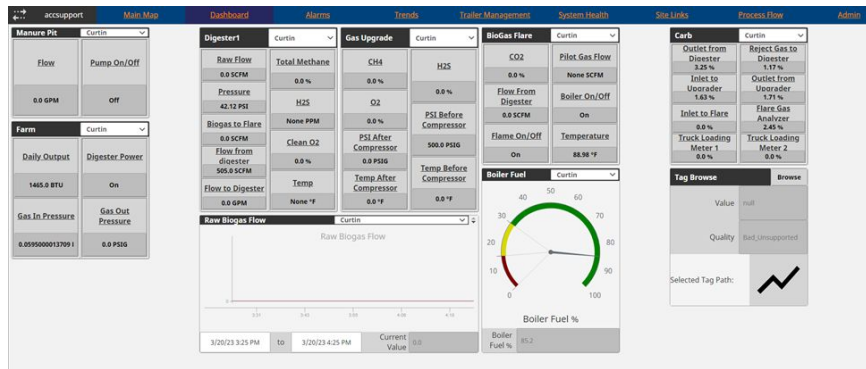
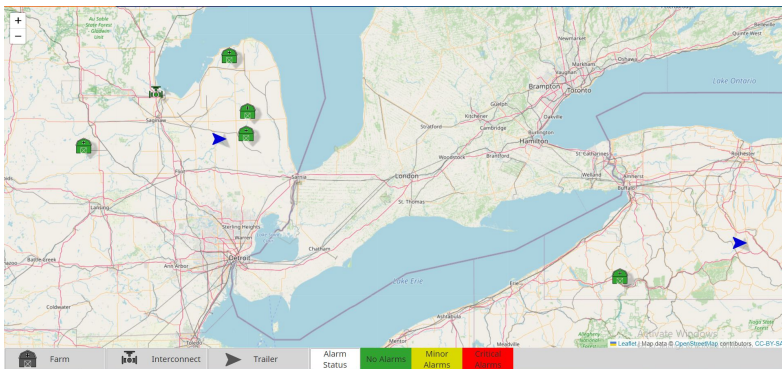
Capture greenhouse gas emission (GHG) costs and links them to economic decision makings
Allow market mechanism to drive climate change actions

Governments and businesses can use it as both a climate policy instrument and a revenue source
Carbon offsets/credits come in various forms
carbon taxes

Emissions Trading Systems (ETs)
Carbon Crediting Mechanisms
Internal carbon prices within organizations



A View To All Stakeholders



Control Central SCADA
Each Site Project + Dashboards + Historical Data
Each Site 30000 Tags
Full Scale 1.2 M Tags



Smart Manufacturing – Sustainable Use Cases

From Cow to Cash - Profitable Renewable Resources

SM Lifecycles

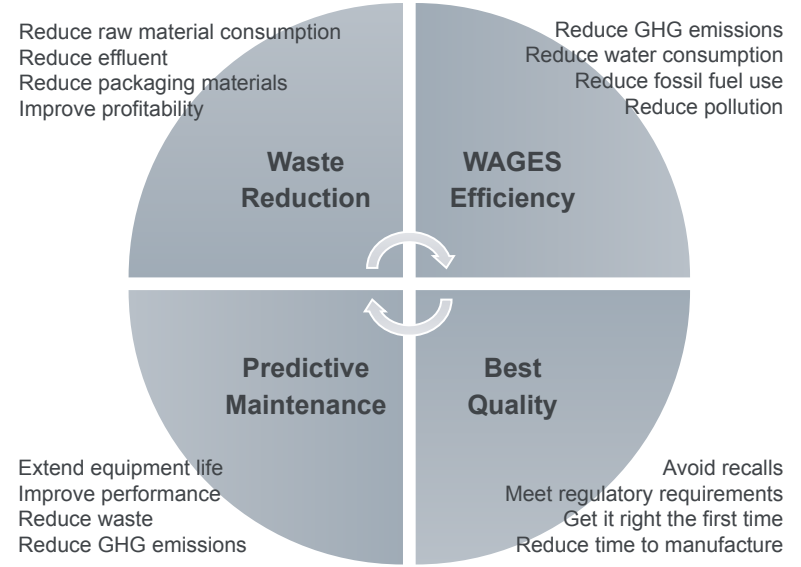
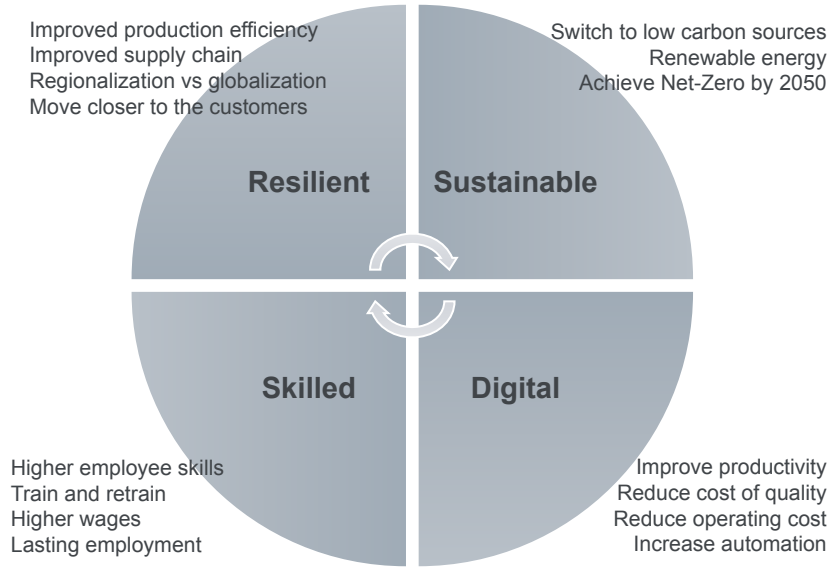
- Production
- Production Asset
- Product
- Supply Chain
- Workforce
- Order-to-Cash

Technology

- Accurate Emission Monitoring
- Real-Time Visibility - SCADA
- Accurate Historical Data –
Material and Energy Balance
- Distributed, Secure, Large-Scale
Integration - MQTT
- Visual Recognition AI For
Accuracy

Smart Manufacturing – Considering the Whole Lifecycle

Automation, digitalization, and the push for real sustainability are reframing how manufacturers produce their products

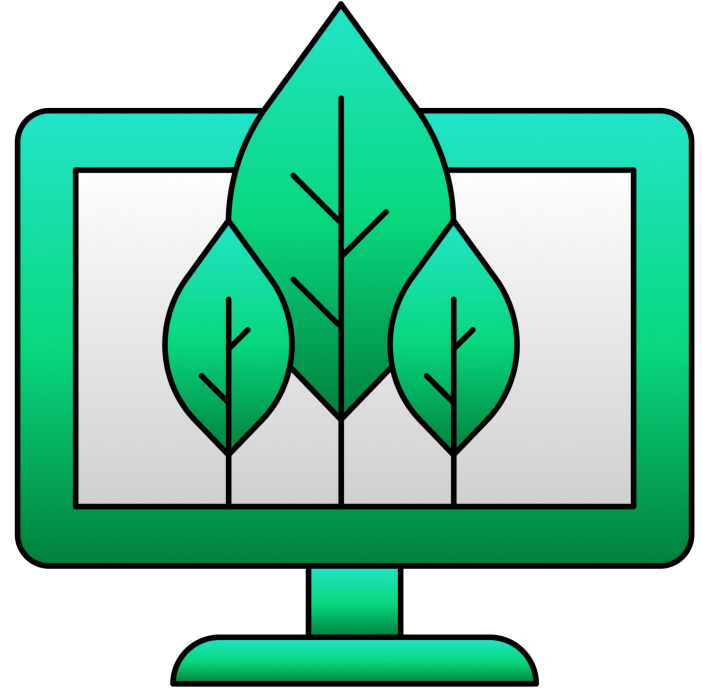


Sustainability

Key Takeaways:

- Sustainability improves efficiency and reduces waste.
- Real-time data and automation drive improvements.
- Smart manufacturing is crucial for sustainability goals.
- Collaboration leads to successful outcomes.

Discussion: Any additional comments or takeaways?





Ready to Try Ignition for Yourself?

Download the full version for free at:
inductiveautomation.com

Ignition 8.3 Available On September 16th!



inductiveuniversity.com

*Ignition User Manual also available at:
docs.inductiveautomation.com*



Ignition Community Conference

September 16–18, 2025 in Sacramento, CA



Get Your Ticket Now at icc.inductiveautomation.com

International Distributors

Brazil	FG Automação Industrial	www.fgltda.com.br
Central America & Colombia	NV Tecnologías S.A.	www.nvtecnologias.com
France	AXONE-iO	www.axone-io.com
Italy	EFA Automazione S.p.A	www.efa.it
Middle East/North Africa	Clarien Solutions	www.clarien.solutions
Norway & Sweden	Autic System AS	www.autic.no
Sub-Saharan Africa	Element8	https://element8.co.za
Switzerland	MPI Technologies	https://mpi.ch
Austria & Germany	Relatech S.p.A.	https://relatech.com

Contact International Distribution Manager Yegor Karnaukhov at: ykarnaukhov@inductiveautomation.com

Questions & Answers



Call us at: **800-266-7798** Email us at: accountservices@inductiveautomation.com



For Inductive Automation Australia, call: **1300 10 8088**

Thank You

Stay connected to us on social media
& subscribe to news feeds:

