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PROFICY OPERATIONS HUB

CASE STUDIES AND GLOBAL REFERENCES

January 2024

Proficy Operations Hub

Enhancing existing Proficy installations as well as new customers including green fields

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Our Proficy Operations Hub customers

- Process water / wastewater
- Manufacture some of the most popular cars
- Produce and package leading beverages
- Build healthcare equipment
- Supply energy to millions of people
- Make the aircraft engines that power the world’s airline fleets
- Produce packaged frozen foods
- And more …

WATER/WASTEWATER | AMERICAS

CREATING POWERFUL, INTUITIVE VISUALIZATIONS

Orlando Utilities Commission

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Orlando Utilities Commission (OUC), a long-time iFIX HMI/SCADA user, worked with GE Digital partner GrayMatter to deploy Proficy Operations Hub to establish a user-friendly way for supervisors to get a real-time read on the system's status.

Leaders at OUC wanted a simple way to create customized reporting screens accessible via a view-only web interface.

Proficy Operations Hub offered the perfect solution, said James Alday, SCADA Coordinator for Water Production at OUC.

"We centrally manage everything here, so if we need outside sources like managers or upper management to view our data. It's very important to have a method of allowing them to view that information without having complete control over our systems. That's where Proficy Operations Hub came in for us."

OUC took the most important parameters from its iFIX SCADA variables screen and organized them by plant in Proficy Operations Hub. Any variables that are out of normal parameters are highlighted by a red box alarm, prompting operators or leaders to seek more info. Since building the variables page, OUC has also expanded its screen monitoring to treatment chemicals.

Result

- Strengthened collaboration & continuous improvement via mobile tablet and remote tech
- Sped up reports to regulators and other compliance personnel
- Flattened the learning curve for new operators
- On-screen widgets display as relational gauges that provide context
- Reduced time and effort required to build custom reports and visualizations
- Improved timely communication about operations with managers & non-technical leaders

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ENGIE

ENGIE and CPA accelerate time to value with web-based intelligence, monitoring and control.

Serving 2.6 million customers, ENGIE, a worldwide reference group for carbon neutral energy and services, worked with CPA to leverage Proficy Operations Hub to accelerate time to value in developing and delivering an expanded remote and local monitoring and control solution, including a foundation of CIMPLICITY HMI/SCADA and Proficy Historian.

CPA maximized use of this highly flexible software including Proficy Operations Hub's Rapid Application Development capabilities in conjunction with the Proficy portfolio to create reusable objects and High-Performance HMI operator screens, GIS functionality, dashboards, and more.

Watch the video *to learn more about ENGIE and CPA's implementation of GE Digital software including Proficy Operations Hub.*

ENGIE

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Monitoring & control of more than 70 remote cogeneration facilities

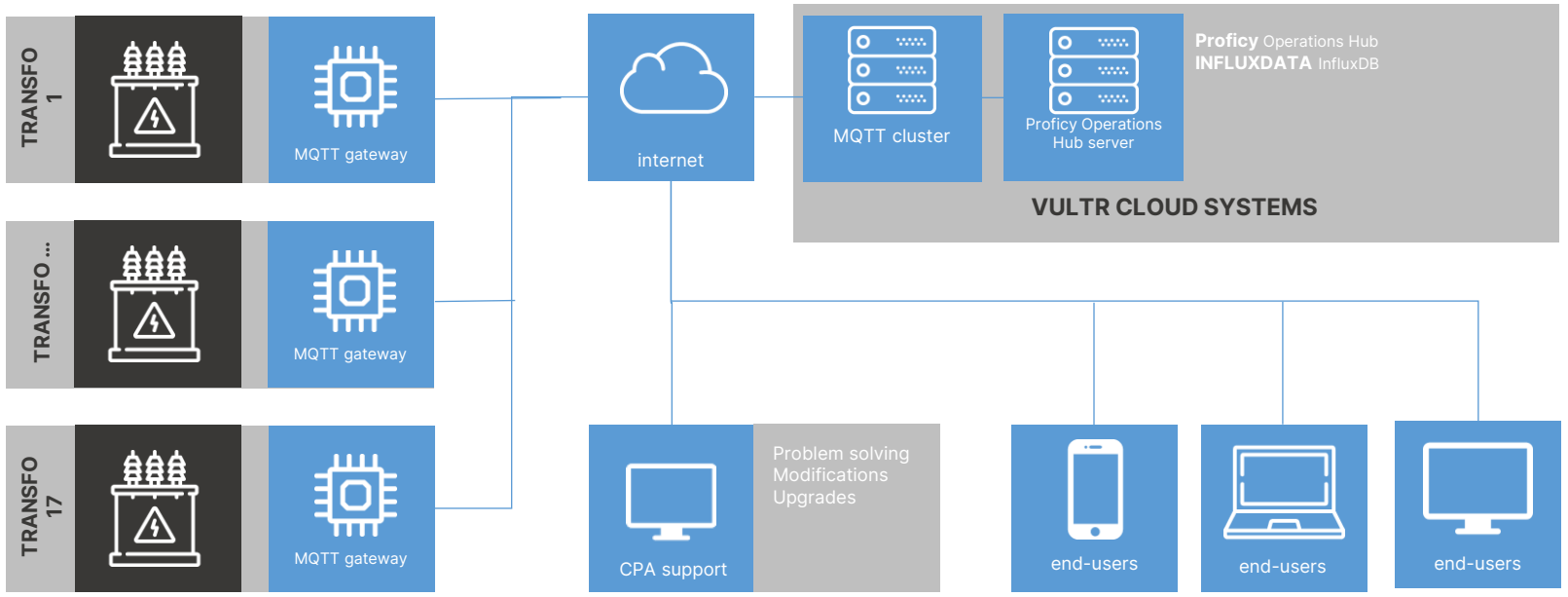
Local Energy Community Mgt, ENGIE Belgium

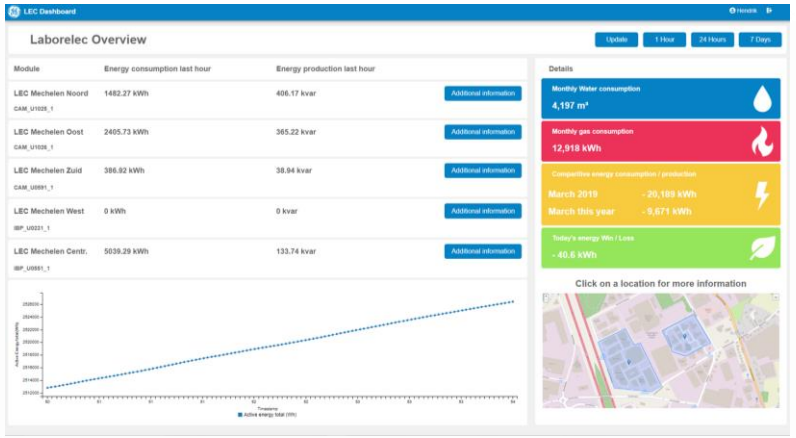
Engineering & Integration: CPA Belgium

- **Local data collection on site**
- **Central data consolidation & monitoring**
  IoT platform and database
- **Flexible user management**
  Multiple user levels
- **Simple license model**
  Non-user based

Reasons for choosing GE

- Perpetual license
- Unlimited assets & users
- Economical price
- High flexibility of the software – ease of use
- Ability to create a widget library





PULP & PAPER | EUROPE

DECREASED QUALITY REJECTS AND WASTE WITH ADVANCED ANALYTICS

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Skjern Paper

Challenge

- Take production to the next level with analytics
- Production of 75,000 tons of paper and board products each year from 100% recycled fiber
- Goal of avoiding or reducing 5% of quality rejects

Action

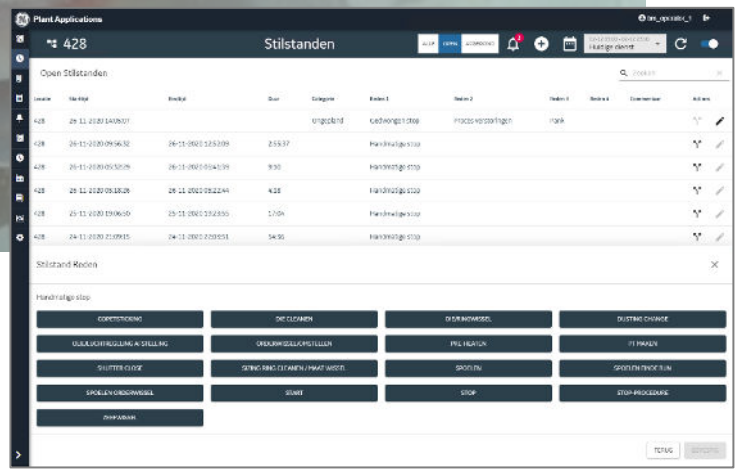
- Implemented Proficy CSense for advanced analytics, taking advantage of 6 hours of free analytics consulting
- Proficy Operations Hub for main PID loop monitoring and visualization
- Analyze: Used available data to discover causes of quality variation and rejects
- Monitor: Monitored the health of PID control loops to reduce process variation
- Predict: Created a predictive model from available data to predict product quality in real time, enabling real-time quality control to reduce quality rejects

Result

- Improved product quality and efficiency
- Reduced waste/scrap and costs
- Decreased chemical usage in process
- Early warning when quality is changing

FOOD & BEVERAGE | EUROPE

BUILDING A LEAN PRODUCTION ENVIRONMENT WITH PROFICY OPERATIONS HUB FOR VISUALIZATION



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Frozen Seafood and Fish Packaging

Challenge

To modernize production and information technology, including upgrading ERP, MES and scheduling

Action

- Upgrade Proficy Plant Applications and ROB-EX Scheduler
- Implement Proficy Operations Hub for centralized visualization

Results

- Lean production environment
- Modern visualization across multiple plants
- Thin client for improved performance
- Mobility for readily available information – operator and managers
- Ability to mine data for trending and analysis for Continuous Improvement and optimization
- A foundation for growth and agility with a scalable solution

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Rivanna Water & Sewer Authority

Rivanna Water & Sewer Authority is using Proficy Operations Hub to gain a foundation for insights into operations and productivity, a critical step in the journey to digital transformation.

Rivanna is a respected environmental and industry leader in the region and uses advanced technology and processes to achieve high standards of performance.

Challenge

- Lag related to web client
- Accessibility of data for trending and analysis

Result

- Faster trending and analysis
- Mobile for information anywhere, anytime
- Modern, thin client speeds performance
- Connectivity to operational and business systems for a single view to information and better decision making

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Fibo

Challenge

- Fibo is a leading supplier of high-quality 100% waterproof Wall Systems. The company was looking to apply analytics to Proficy's MES data to optimize process OEE performance, throughput, and product quality.

Actions and Results

Working with GE partner Novotek, the team implemented Proficy CSense and Proficy Operations Hub as part of a solution to analyze combined Proficy Plant Applications and Proficy Historian data. In just hours, they identified and confirmed critical process variables and thresholds, and raw materials properties – highlighting or confirming multiple potential improvement insights.

These insights included:

- Which combinations of raw material vendors work best for them
- What are the optimal raw material quality thresholds, beyond which their risk of defects increase significantly
- What are the critical process variables and their thresholds to produce best final product quality

Results included improvement insights in hours by combining proven analytics, visualization and MES software.

FOOD & BEVERAGE | AMERICAS

INCREASING QUALITY WITH VISIBILITY INTO MANUFACTURING OPERATIONS

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Major Frozen Entrée Manufacturer

Proficy Operations Hub provides modern, mobile thin client visualization with Proficy Plant Applications and Proficy Historian.

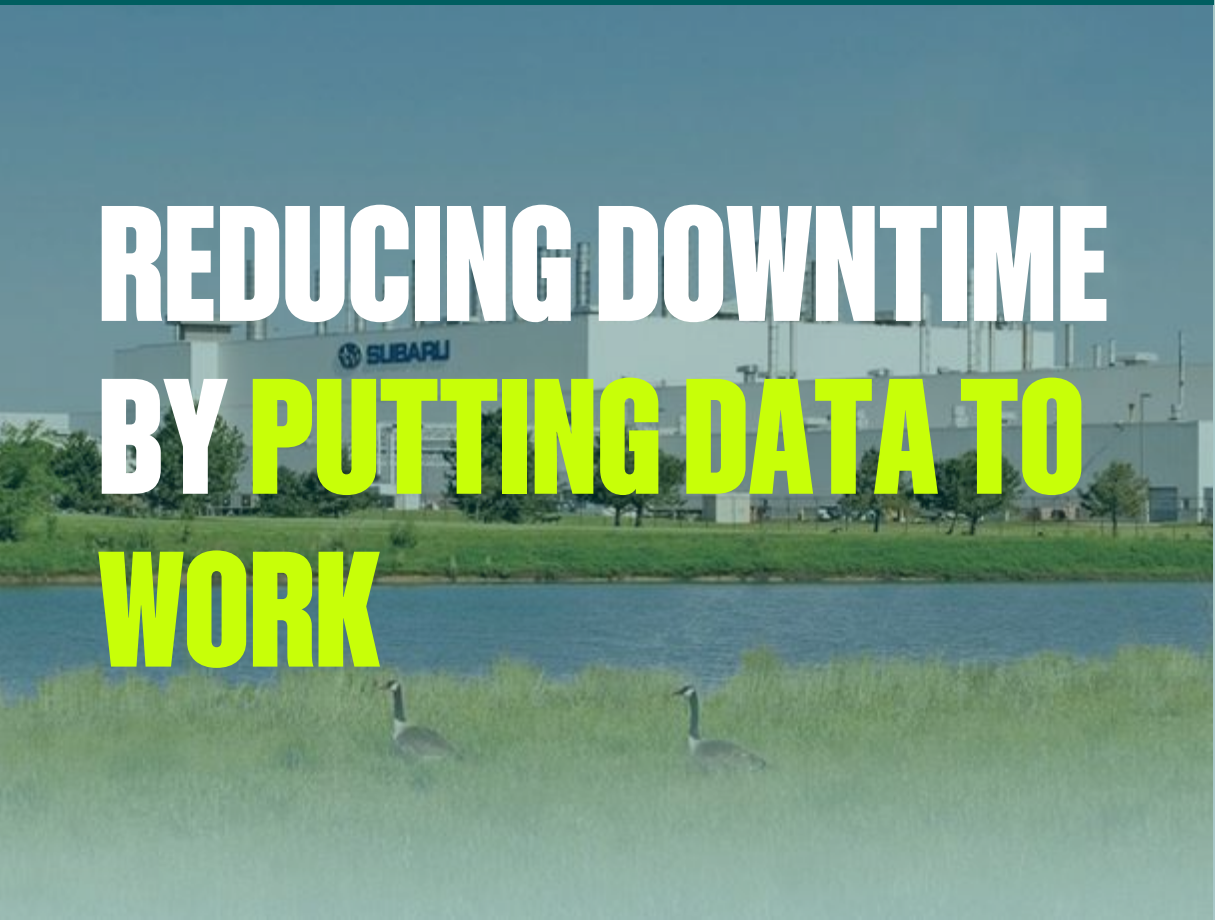
This major frozen entrée manufacturer is using Proficy Operations Hub in conjunction with its existing, enterprise-wide standard MES solution featuring Proficy Plant Applications and Proficy Historian.

With Proficy Operations Hub installed at a pilot plant, the company is now improving the consistency of its production lines – across multiple food components that build to the final frozen entrée product.

The team can do on-demand analysis using Proficy Historian data, identify trends, and determine the root of any problems. Rapid Application Development tools allowed an integrator partner to quickly build new widgets.

With the successful pilot, this major food manufacturer is rolling Proficy Operations Hub through all its plants.

AUTOMOTIVE | AMERICAS



REDUCING DOWNTIME BY PUTTING DATA TO WORK

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Subaru

Putting data to work at the fastest growing car company in America

Subaru has a lot of collected data. With Proficy Operations Hub, the team will use the data better to help reduce production interruptions (downtime). Proficy Operations Hub will help Subaru:

- Identify what might become a quality issue before it does
- Achieve a centralized development tool
- Have a tool to help the team collaborate with all areas of the plant
- Provide tools to management to make educated decisions on real-time data and historical issues the team may have to deal with

Watch the video to learn more about Subaru's implementation of GE Digital software including Proficy Operations Hub.

FOOD & BEVERAGE | AMERICAS

HIGH QUALITY AND CONSISTENCY AT GREENFIELD SITE

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Multi-Plant Beverage Manufacturer

Beverage manufacturer selects Proficy Operations Hub for centralized visualization for MES solution at new greenfield site and three other plants.

This North American beverage manufacturer scaled up production of its branded and private-labelled products with a new greenfield site. With quality and consistency as its primary goals, the company selected GE Digital's Proficy Plant Applications in combination with Proficy Operations Hub and Proficy Historian.

Proficy Operations Hub offered a light front-end visualization tool as a window into the company's production lines. Accessible data improves decision making – both for operators and managers – and speeds the right actions.

Additionally, GE Digital's Proficy solution gives this beverage manufacturer the foundation to scale as their growth continues and business model further evolves.

Following success at the greenfield site, the company has begun implementation at three additional plants in the US.

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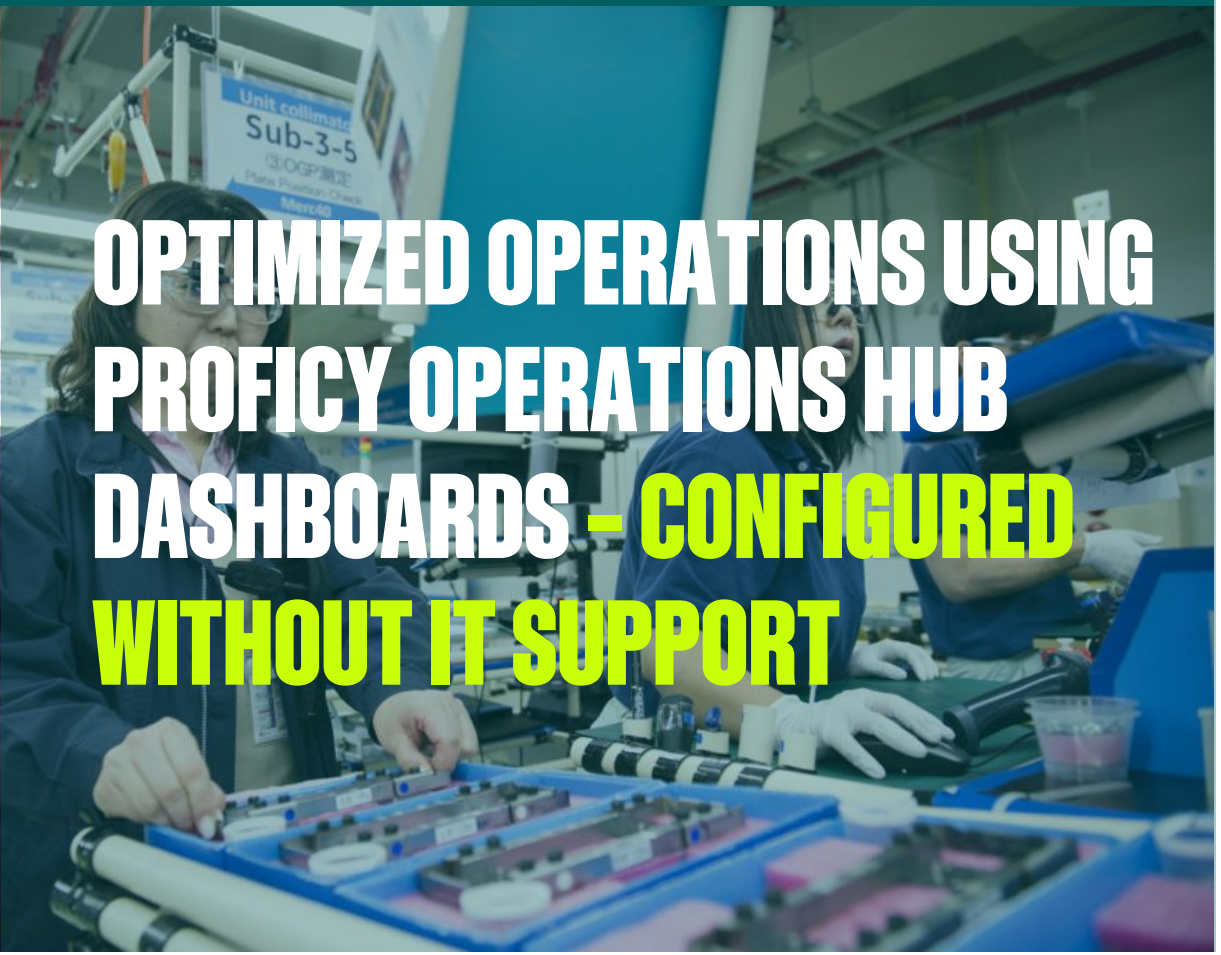
GE Aerospace

The team at GE Aerospace is deploying their next generation MES that will reduce the number of applications across 50+ manufacturing shops, allowing for maximum efficiency of the shop floor works while tracking the engine build genealogy to the final bolt put on an engine.

GE Aerospace's OneMES roadmap leverages Proficy Plant Applications and its ability to handle mixed- manufacturing environments – for one solution with MES, quality, and machine connectivity – and Proficy Operations Hub as the next step in new generation visualization.

Watch the video to learn more about GE Aerospace's implementation of GE Digital software including Proficy Operations Hub.

LIFE SCIENCES | ASIA



OPTIMIZED OPERATIONS USING PROFICY OPERATIONS HUB DASHBOARDS – CONFIGURED WITHOUT IT SUPPORT

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GE HealthCare - Hino, Japan

The GE HealthCare factory in Hino, Japan makes both parts for large medical scanners and small, precision equipment.

The Hino team has used Proficy Operations Hub to create digital apps for greater visibility and work efficiency. With its ease of use, Proficy Operations Hub allows GE HealthCare to quickly create and modify apps without needing IT programming skills.

The Proficy Operations Hub plant dashboard app has increased real-time visibility of production process status and progress, helping GE HealthCare to optimize operations and reduce costs. The local line leader designed, developed, and maintains the dashboard app, reducing Total Cost of Ownership while improving ease of use.

GE HealthCare's Hino facility was recognized as one of 18 new factories in the World Economic Forum's Global Lighthouse Network of advanced manufacturers for its use of technology to transform into digital Lean manufacturing and achieve the next level of operational performance.

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Global Automotive OEM – Asia Plant

This global automotive OEM is a long-term user of GE Digital's CIMPLICITY and Tracker, standardized across all of its plants.

Now, taking production to the next level, the company has partnered with GE Digital's Professional Services team to implement Proficy Operations Hub along with Proficy CSense and Proficy Historian.

On the assembly line, Proficy Operations Hub provides dashboard visualization including ANDON. Teams can look at metrics for different timelines, comparing historical and current operations. Using Rapid Application Development tools, the team easily customized the Proficy Operations Hub trend card to meet the automotive OEM's needs.

The company can examine what a proper amount of time is for an assembly process and what it is actually taking – with the ability to compare best practices against current runs.

The company has also implemented Proficy CSense and Proficy Operations Hub in its DC tooling system for custom analytics visualized in the modern, thin client of Proficy Operations Hub.

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