



# Proficiency Operations Analytics from GE Digital

Increase efficiency with cloud-based predictive analytics, seeing measurable improvement within days

## Uncover hidden efficiencies and operationalize at enterprise scale with out-of-the-box analytics apps

Imagine if you could have advance warning and automated diagnosis of quality, production, downtime, and asset reliability problems? Cloud-based analytics make it possible. Out-of-the-box predictive analytics apps make it easy – no data scientist required.

Proficiency Operations Analytics is a proven self-provisioning, ready-to-deploy SaaS-based predictive operations center for industrial IoT and AI. This cloud analytics solution helps operations, engineering, and executive teams gain data visibility, uncover efficiencies, and operationalize proactive actions at enterprise scale.

Within minutes of connecting Proficiency Operations Analytics to operational and maintenance data sources, users achieve visibility to insights that can improve operational and revenue performance.

Experience Proficiency Operations Analytics with an accelerated pilot and payback. With Proficiency Operations Analytics, you:

- Get data and visibility *in minutes*
- Achieve actionable insights *in hours*
- Operationalize and scale *in days*

### Outcomes

- Improve operations with advance warning and automated diagnosis of quality, production, downtime, and asset reliability problems
- Increase efficiency across your plants with proven cloud-based predictive analytics
- Automate continuous improvement to accelerate results and standardize process changes
- Drive precision with the ability to visualize, analyze, optimize, and execute with a closed-loop solution
- Leverage pre-built applications for faster time to value

## 01 Get data and visibility in minutes

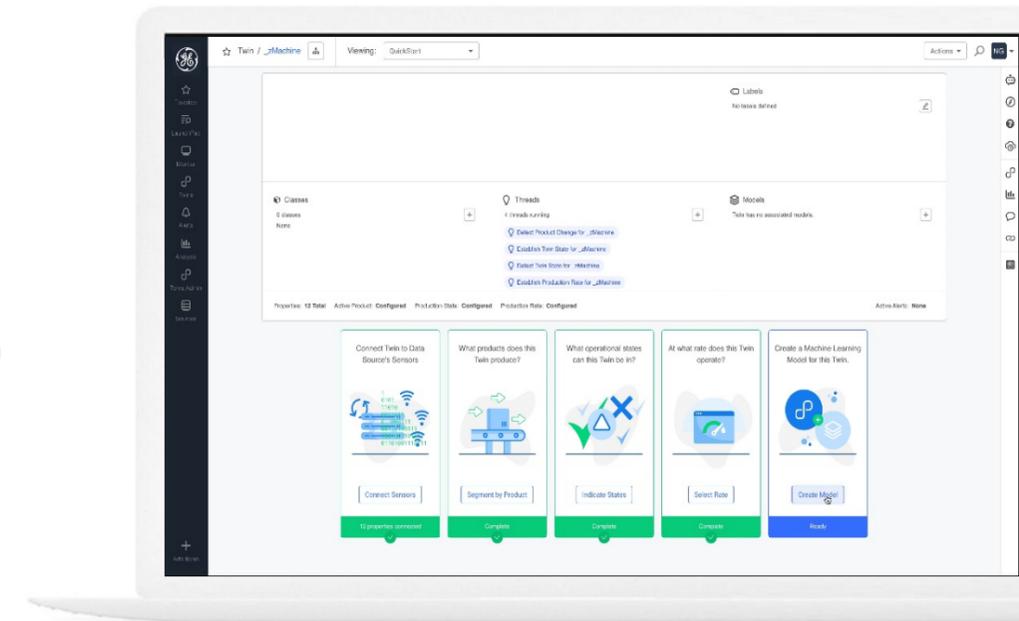
- 100+ industrial pre-built data agents that automatically connect to historians, PLCs, MES, SCADA, ERP, Lab DBs, IoT devices in a secure-by-design, frictionless way
- Automated normalization of disparate properties for immediate analysis
- Self-provisioning process configures Digital Twins automatically to add the context required to automate analytics on all process and event data

## 02 Get insights in hours to optimize operations

- Add logical, no-code workflows to add context to production assets and processes
- 30 pre-built industrial predictive applications easily assigned to Digital Twins without any data science or app dev requirements
- Ability to “configure once, deploy automatically” propagates thousands of unique, personalized insights across assets and process
- Select refined data to recommended Model Template and let the Model Factory train the Model

## 03 Operationalize and scale in days

- Systematically transform analytics outcomes to no-code workflows that can automate critical processes
- Digital Threads route actions to users, systems or equipment
- Operators and engineers can scale preventative setpoint adjustments across all industrial contexts
- Surface the economic impact of operatizing actions to executives via curated datasets that are easily visualized via traditional analytics dashboards



Proficiency Operations Analytics helps operations, engineering, and executive teams gain data visibility, uncover efficiencies, and operationalize proactive actions at enterprise scale.

## 04 Achieve fast time to value with pre-built predictive analytics applications

With Proficiency Operations Analytics, typical deployments achieve a rapid Return on Investment on subscription investment. GE Digital accelerates the gains from predictive analytics with pre-built applications.

The six most commonly used out-of-the-box applications include:

- Predictive Quality
- Predictive Throughput
- Predictive Energy Efficiency
- Predictive Uptime
- Predictive Asset Reliability
- Predictive Asset Life

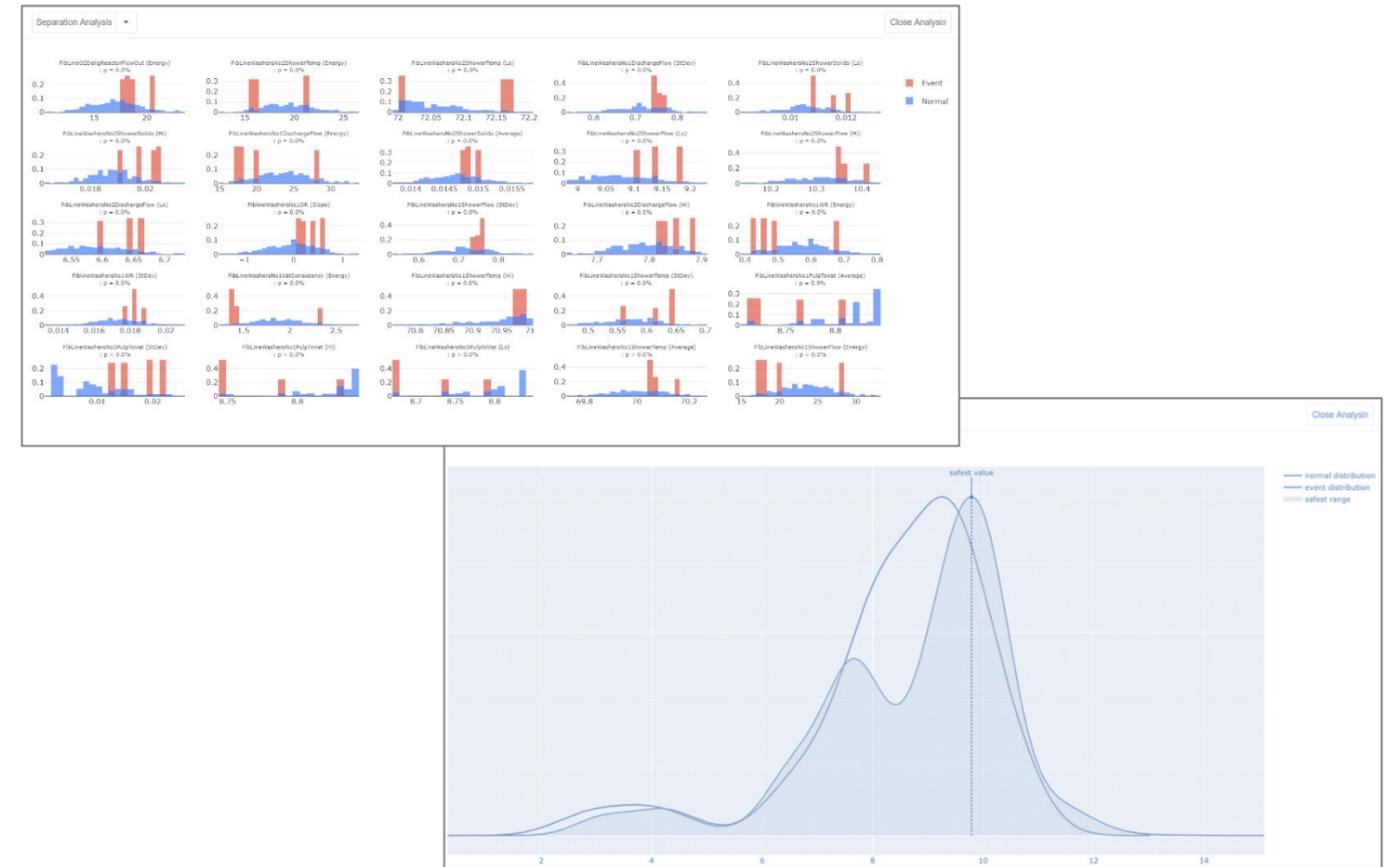


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## Features

- Connects to virtually any system or sensor gateway or IoT platform in minutes
- Applications can be configured in less than one hour to start proactively driving improvements across key operations and maintenance metrics
- Edge Agent performs local processing and maintains a secure-by-design connection to the cloud
- Process and event data connected
- Product-specific context captured
- Operational states and rates defined
- Process, event and context visualized
- Single pane view of all assets and process
- Top drivers that explain variability
- Best recipe/centerlines for eliminating variability
- Real-time anomalies
- Real-time predictions
- Real-time recommendations
- Suggested actions for each application
- Workflows that operationalize analytics
- Enterprise-wide view of the impact of actions
- Line-based operator alerts with suggested steps
- Setpoint-specific adjustments



### OPERATIONS



Predictive Quality

- Run CpK
- First Pass Quality %



Predictive Throughput

- Production Rate
- Run Length
- Cycle Time
- Material Cost / Unit Production



Predictive Energy Efficiency

- Energy Cost / Unit Production

### OPERATIONS & MAINTENANCE



Predictive Uptime

- Uptime %
- Remaining Time to Downtime
- Probability of Downtime



Predictive Asset Reliability

- MTBF
- Remaining Time To Failure
- Probability of Failure



Predictive Asset Life

- Remaining Useful Life
- Total Life

### MAINTENANCE

Learn how Proficiency Operations Analytics helps you achieve visibility into insights that can improve your operational and revenue performance.

LEARN MORE



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## Services

In the world of Industrial Internet of Things (IIoT), organizations are able to optimize productivity, reduce costs, and achieve Operational Excellence. While this is an exciting time for opportunity and growth, it can also bring on new challenges, questions, and uncertainty. No matter where you are on your IIoT journey, GE Digital has the right services offering for you.

**Advisory Services** We can help you plan and start your IIoT journey in a way that aligns to your specific business outcomes.

**Managed Services** We can help you maintain your critical machines from one of our remote locations around the world using model-based predictive analytic technology.

**Implementation Services** Our experienced global Automation partners can implement a collaborative, multi-generational program that marries your existing investments to the right enhancements and technology.

**Education Services** We specialize in education services to ensure that you're leveraging our solutions to the fullest extent with our training and certificate programs.

**Acceleration Plans** Let us help by ensuring that your business continues to operate at its highest efficiency, all while mitigating risks to your investments.

**Security Services** Our solutions provide industrial-grade security for a wide range of OT network and application topologies.

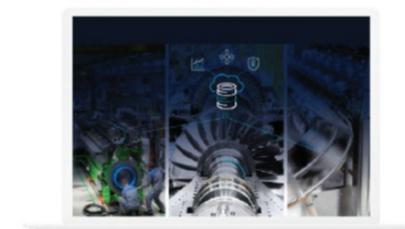
## Related Products for Your Digital Transformation Journey

GE Digital's Proficiency suite helps you precisely monitor, control, and visualize every aspect of your operations, enabling operators to make the best decisions faster. Transforming your business requires foundational innovations that lay the groundwork for future success.



### Proficiency Operations Hub

Aggregate and visualize contextual and situational information for industrial applications – supporting rapid application development and rich displays for faster operational response & better decision making



### Proficiency Manufacturing Data Cloud

Achieve an unprecedented ability to create connected factories that provide a cloud-hosted enterprise manufacturing system of record while optimizing your on-prem MES data footprint and performance



### iFIX

Gain visibility into your operations and secure agility for smarter decision making that drives results with industry-leading HMI/SCADA used around the world.



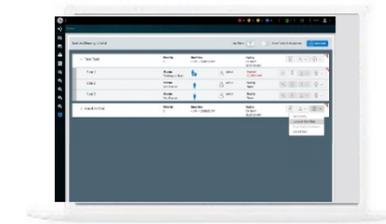
### Proficiency Historian

Optimize asset and plant performance through time-series and A&E industrial data collection and aggregation. Improve decision-making with advanced trend analysis.



### CIMPLICITY

Drive real-time visibility for smart operators with true client-server based visualization and control with proven HMI/SCADA used by the largest industrial organizations



### Proficiency Workflow

Guide operators with dynamic, interactive electronic work instructions and eSOPs for more consistent operations and optimized processes.

#### About GE

GE (NYSE: GE) is the world's Digital Industrial Company, transforming industry with software-defined machines and solutions that are connected, responsive and predictive. GE is organized around a global exchange of knowledge, the "GE Store," through which each business shares and accesses the same technology, markets, structure and intellect. Each invention further fuels innovation and application across our industrial sectors. With people, services, technology and scale, GE delivers better outcomes for customers by speaking the language of industry.

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#### Contact

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