Putting the
Industrial
Internet to Work

GE Digital’s Portfolio Overview
So much data, so little direction. The number of connected machines operating globally is expected to reach 3.1 billion in 2019, and this equipment generates terabytes of data that remain largely untapped. It is estimated that less than 30% of Industrial Internet data is actually being analyzed to improve operational efficiency and business outcomes.

This presents a unique opportunity for competitive advantage. At a time where global industrial productivity has grown stagnant, forward-thinking firms are capitalizing on the wealth of available equipment data to realize significant benefits while lowering cost and risk. But, understanding and leveraging this data requires the right tools and expertise.

At GE Digital, we have more than a century of industrial knowledge that makes us uniquely qualified to analyze and translate industrial data into powerful business outcomes. We continue to put this data to work for thousands of customers—collecting more than 25 billion data points a day. By ingesting, storing, monitoring, and analyzing data from millions of pieces of equipment, our advanced analytics can detect equipment anomalies, triage critical events, improve company-wide visibility, and signal predictive maintenance alerts. Across the enterprise, we’re arming our customers with the digital tools they need to reach new business outcomes.
It all begins with **implementing the right structures and processes at the factory floor**. Smart digitization helps reduce costs, improve quality, and improve efficiency.
Predix HMI/SCADA

Predix HMI/SCADA enables operators to monitor, control, and visualize every aspect of what’s happening on the factory floor at a glance. With this technology, users can quickly pinpoint actionable information through a model-based HMI for faster response and development.

Using Industrial Internet of Things (IIoT) technology, HMI/SCADA helps alert operators of issues or malfunctions so they can address them quickly through a guided real-time event response. Providing decision support for operators, technicians, managers, and more, this software centralizes equipment and system data through a digital thread that streamlines interfaces across functional silos. It helps businesses achieve fast, condition-based management, and plays a role in improving Electronic Standard Operating Procedures (eSOP), empowering operators to be proactive instead of reactive.

This has delivered:

- 40% faster development
- 35% improvement in alarm resolution
- 80% less time spent navigating
- 40% faster identifying critical data
- 60% faster identifying relevant screen for alarm
- 70% increase in usability score

Learn how Subaru strengthened productivity with better visibility from Predix HMI/SCADA

→ Learn More
Predix Manufacturing Execution Systems

Predix Manufacturing Execution Systems (Predix MES) is a suite of solutions that powers up your production through insights and intelligence via data integration. In an interconnected world, businesses need tools that bring together the physical and digital aspects of the job. With contextualized product floor, inventory, schedule, and order execution management data as well as quality and efficiency KPIs, Predix MES allows users to manage, monitor, and synchronize the execution of physical processes and people involved in transforming raw materials into intermediate and/or finished goods.

Predix MES helps reduce costs, improve quality, and speed up production through resource alignment and performance optimization, driving these outcomes:

- **10-20%** reduction in unplanned downtime
- **Up to 20%** inventory reduction
- **Up to 20%** or more in recovered capacity

Learn how Procter & Gamble improved reliability, productivity, and safety with Predix MES

→ Learn More
Stabilizing and streamlining operations is an ongoing process that ultimately leads to optimal yield, quality, and efficiency.
Predix Operations Performance Management

With this complete control-to-cloud solution, you can bolster the performance of plants, sites, and enterprises through stabilization and optimization. Predix Operations Performance Management (Predix OPM) delivers the operational insights to improve the responsiveness, throughput, quality, cost, profitability, and efficiency of production operations.

Built on a foundation of integrated IT and OT data, machine learning, and artificial intelligence, Predix OPM is designed to address the unique requirements of process engineers and operations managers to quickly identify process deficiencies, leverage historical and real-time information, and then apply powerful data visualization and analytics to deliver data-driven recommendations.

Developed specifically to address continuous and discrete process operations, Predix OPM incorporates site-level process monitoring and real-time information management with powerful, scalable enterprise level cloud-based analytics to provide a seamless control-to-cloud solution. As a result, local teams are able to address site-specific situations while enabling an enterprise level view to identify line-to-line and plant-to-plant benchmarking and best practices opportunities—further improving operational productivity, flexibility, and forecast predictability.

This has generated the following results:

- **10%** increase in throughput at a mine refinery
- **10%** reduction in power plant startup fuel usage
- **2.5%** reduction in mine power consumption
- **3.3%** increase in iron extraction efficiency
- **3-4%** increase in power plant capacity

Learn how Lonmin transformed its operational management with Predix OPM

→ Learn More
When operators are able to spot potential issues before they escalate, they can keep things running smoothly and without costly downtime. Predictive analytics help monitor and analyze equipment performance in real-time, preventing failures or outages.
Predix Asset Performance Management

Predix Asset Performance Management (Predix APM) consists of a versatile software suite that connects a wide range of disparate data sources across a single plant, several factories, or entire enterprises. Enabling proactive equipment maintenance, Predix APM helps you increase reliability and availability, while managing risk and minimizing unplanned downtime.

Predix APM works across all equipment, all OEMs, and all industries. Designed to enable a continuous loop of improvement, Predix APM provides you with a unified view of your assets’ current state, empowering you to detect equipment issues before they occur, and to optimize production across availability, risk, and costs.

**Predix APM has delivered these positive impacts for customers:**

- **3-40%** EH&S incident reduction
- **2-6%** increased availability
- **10-10%** reduction in maintenance
- **5-10%** inventory cost reduction

Learn how Vale Fertilizantes salvaged $1.4 million in production losses with Predix APM

→ Learn More