SPLUNK® FOR THE INDUSTRIAL INTERNET OF THINGS
Real-time and predictive insights from sensors, devices and industrial control systems

- **Gain a simple view of complex industrial operations** by seamlessly integrating data across disparate systems, sensors and applications and eliminating technology, data and people-silos

- **Real-time and predictive insights** help you predict equipment failure before it occurs, minimizing unplanned downtime and the high costs associated with it

- **Shift your view of operations from reactive to proactive** to discover new business opportunities, drive productivity, and increase overall plant performance

Industrial organizations are increasingly looking at IoT and machine data to better monitor industrial operations and predict maintenance needs. But disparate data and the lack of a consolidated, real-time view creates a reactive approach to managing operations. Data can come in many forms—an alarm or alert, a work order or sensors and critical events—and can be missed without a consolidated view, costing customers millions of dollars in revenue from unscheduled downtime, poor operator productivity and bad quality.

Splunk Industrial Asset Intelligence delivers real-time predictive analytics that enables organizations to proactively optimize operations and improve performance. Splunk collects, analyzes and visualizes real-time and historical machine data from any source—including sensor data, OT connected assets and products—to create a simple real-time view of complex industrial data.

Splunk Use Cases for Industrial IoT

### Monitoring and Diagnostics of ICS and Industrial Assets
Get a unified, simplified real-time view into the health of PLC, embedded PCs, process control software and machine assets to maximize availability, reliability and quality—all while minimizing unscheduled downtime.

Security, Safety and Compliance
Help protect mission-critical assets and industrial systems against cybersecurity threats. Gain visibility into system performance or set points that could put machines or people at risk and satisfy compliance reporting requirements.

Predictive Maintenance
Forecast and predict unscheduled downtime of machine assets— gain real-time insight into asset deployment, utilization and resource consumption. Recognize patterns and trends, and use operational data to proactively approach long-term industrial asset management, maintenance and performance.
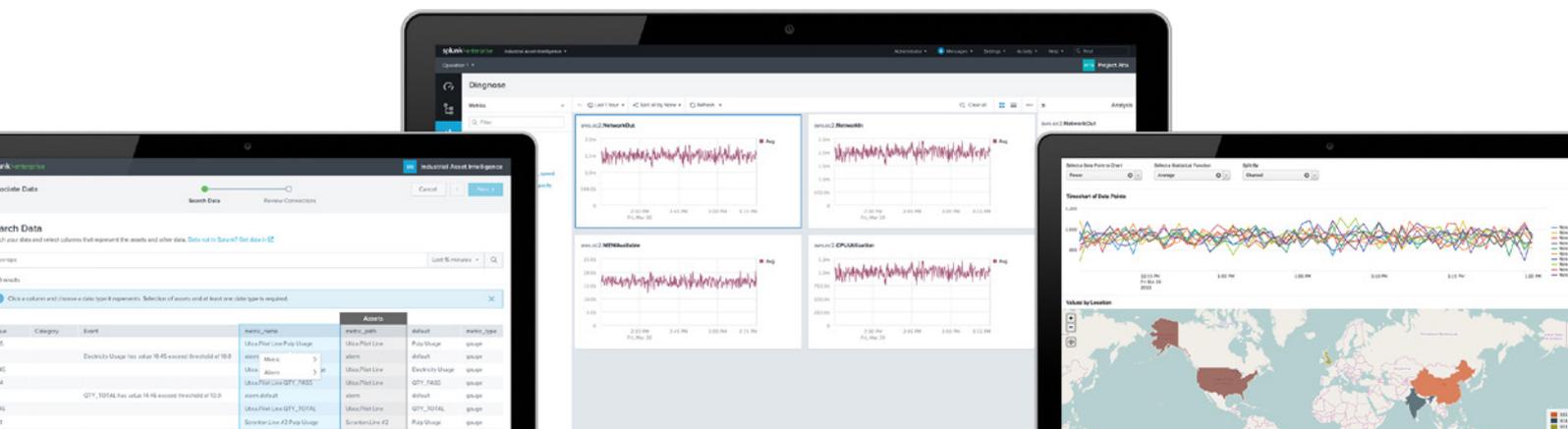
Ensuring Customer Success

Manufacturing: Shaw Flooring

Shaw is the largest floor manufacturer in the world, with 16 manufacturing and distribution facilities across 30 states in the U.S. With over 30,000 SKUs (e.g. carpet, laminate, tile, stone, hardwood), Shaw recycles approximately 100 million lbs. of carpet every year.

Before Splunk, Shaw had a poor understanding of product quality—they had time-stamped quality data and production data but no easy way to correlate it. With Splunk, Shaw is able to gain valuable insights into uptime, quality, production metrics and trends in real time. It can connect the dots between production and quality targets by accessing and combining these metrics,improving operator efficiency and delivery on operation and business goals.

Transportation: DB Cargo

DB Cargo is Europe's largest rail freight operator—last year its fleet carried 300 million tons of cargo across Europe. How does it keep track of it all? With Splunk software's ability to collect and correlate data from any input, DB Cargo can ingest data from sensors, diagnostic codes, and geolocation in real time from their massive rail fleet. Once the data is ingested, DB gains critical insights into locomotive health and condition, increasing availability and reliability while reducing costs.

"Splunk Enterprise helps DB Cargo improve the reliability and availability of our assets," said Mathias Thomas, Head of Asset and Technology Strategy, DB Cargo.

Integrate with Leading IIoT Platforms and Services

Your IIoT data can come from a variety of sources including process historians, connected assets, building management systems and cloud IoT platforms. Splunk's constantly growing ecosystem of technology partnerships and pre-built integrations give you real-time access to this data. Leading IIoT data platforms like **OSIsoft PI System, PTC Kepware, Tridium** and **AWS IoT** have pre-built integrations with Splunk software, enabling fast time to value for developers and end users.

With the Optimate Integrator for PI System to Splunk, you can continue to fully leverage your current and future investments in the PI System without needing to move your OT and IT data out of their native environments. The **Kepware Industrial Data Forwarder for Splunk** enables real-time data collection from over 150 open and proprietary industrial data protocols common in energy, manufacturing, and oil and gas environments.

Download Splunk for free or explore the online sandbox. Whether cloud, on-premises or for large or small teams, Splunk has a deployment model that will fit your needs. Learn more about how Splunk customers like Bosch and DB Cargo are realizing value from industrial data and the IoT.