TOP 3 BENEFITS OF IIOT FOR MANUFACTURERS

Even before the current pandemic, manufacturers faced increased challenges from industry and government regulations, and customer demands for lower prices and faster delivery. Now, strain on the global supply chain and economic pressures at home mean the lean operations of years past just aren't enough to maintain a competitive edge. More than ever, manufacturers need connected systems to ensure that every opportunity for time and cost savings is acted upon.

Enter the IIoT. Unlike the consumer-facing Internet of Things (IoT) with connected smart phones, cars or even appliances, the Industrial Internet of Things connects devices to provide data visibility, improve performance, or enable automation in a manufacturing environment. The IIoT can drive significant benefits for manufacturers operating in the new business climate of 2020 and beyond.

Ensure Data Integrity

The backbone of the IIoT is data. Not only does it allow data to be collected from PLCs, machines, scales and more, but lets you analyze the data to put it to work, addressing inefficiency and waste throughout the shop floor. In order to make informed decisions, it's critical to ensure access to real-time metrics from each stage of the manufacturing process.

For example, IIoT connected devices can help add visibility by pulling data from automated handling equipment, retrieval systems, MES or proximity sensors. In fact, a recent study from IoT Analytics concludes that "IIoT platforms are beginning to replace MES and related applications, including production maintenance, quality, and inventory management."

This means IIoT systems bring the advantage of a single system of record for data integrity.

Automated data collection eliminates time consuming and error-prone manual data entry. In turn, managers can reduce the time spent gathering reports while improving reaction time to address problems as they happen.

Add Real-Time KPIs

Problems on the shop floor can include everything from machine downtime to misplaced product and quality control. Each issue increases inefficiency, slowing down production time and increasing costs from labor and material waste.

The right IIoT system identifies where and when issues occur, making KPIs available from a single dashboard, without manual calculations. For instance, a real-time view of overall equipment efficiency (OEE) helps you identify and address areas for equipment improvement. In addition, you can track machine and user activities and events without the complexity of using many systems.

Cut Waste & Inefficiency

Apart from machine monitoring, the IIoT provides insights to costs incurred from material waste and inefficiency. Identifying bottlenecks from workflows is key to protecting your bottom line.

Even before the pandemic, manufacturing and warehousing faced a labor shortage. Now, with further reductions in available workers, making the most of your labor force is more important than ever.

The IIoT-connected shop floor collects and updates labor data. This can include analyzing scheduled time versus direct/indirect time, or identifying where goals can be reset to create optimal output and scheduling of jobs.

Along with labor tracking, connected devices can add visibility to processes that make a critical difference in production costs. For instance, a recent study by ToolingU and SME said "16 percent of manufacturers report scrap and rework rates of 4 percent of sales or higher: i.e., a $50 million plant is effectively wasting $2 million to revise or discard products." The benefits of identifying and addressing unnecessary scrap and rework are plain to see.

The Time Has Come

2020 has shed new light on the need to optimize manufacturing workflows to cut costs while maximizing productivity. Last century's lean manufacturing and production methodology has given way to today's IIoT, with a surge of transformative technology driving the industry. To maintain a competitive edge, manufacturers must add real-time access to critical information generated across the organization. The IIoT makes this possible by seamlessly integrating with multiple databases, machines, equipment and business systems.

The IIoT is nothing new to Radley. For over 45 years, Radley's solutions for integrated data collection have helped manufacturers gain real-time visibility to their processes, automating tasks and increasing efficiency along the way. Now we bring our expertise together with today's world of internet-connected devices and Cloud computing. From monitoring machine downtime and maintenance, to regulation compliance and quality control, Radley brings the IIoT together to truly maximize on your data. Learn more and request a free demo at **www.radley.com**.

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