

Manufacturing MINUTE



The Internet of Things: Is Your Company Ready?

On August 23rd, GBQ hosted John Brandt, CEO of MPI Group, for a presentation on the state of the Industrial Internet of Things (IoT). If you're wondering what is the IoT or how does this apply to my business?, you're not alone. John presented that as recently as November of 2014, as many as 43% of manufacturers surveyed have never heard of the IoT, yet this technology will drastically change the manufacturing landscape within the next five years.

The IoT is the change in manufacturing that embeds a network of physical objects with intelligence and allows them to collect tremendous amounts of data, communicate with other physical objects and react. This includes sensors, controls and software being interconnected and machines "talking" to each other, removing required human interaction for a flow of processes. IoT is making manufacturing smarter, quicker and more profitable.

The IoT revolution is a two-pronged spear, with IoT enabled processes, or the means by which manufacturers are leveraging IoT technologies in their facilities, and IoT enabled products, embedded with IoT intelligence. IoT enabled processes improve product quality, increase speed, decrease costs and reduce maintenance and downtime. Current IoT enabled process users are now better forecasting preventative maintenance, more efficiently optimizing machine time and reducing overhead. IoT enabled products are in high demand by consumers and changing the daily routine of users. You don't have to go far before you see a fitness tracker on their wrist, or someone controlling a home security system or paying for coffee with a tap on the phone.

The IoT is being adopted throughout different types of industries. In the waste refuse industry, one company has installed sensors on municipality collection bins, which sends alerts when the bins are near full. The company makes fewer trips and empties only full bins, reducing costs. In the hospitality industry, distributors at local taverns have installed sensors that weigh beer kegs. These sensors collect information about product popularity among consumers and ensure replacement kegs are delivered before your favorite beer runs out. In the recreational fitness industry, wireless bike locks allow you to not only lock and unlock your bike with your phone, but also remember your bike location, track biking activity and enable bike sharing programs to be enjoyed by consumers.

The IoT will change the manufacturing landscape, but manufacturers need to have a comprehensive strategy and collaboration among key personnel to capitalize on the opportunity. Imagination of opportunities and the discipline to develop and stick to a strategy, as well as the commitment of adequate financial and personnel resources, are critical to successes with the IoT.

Most companies will require investments in their information technology and operations technology networks to support the adoption of the IoT. Network security and sensory objects will also be significant investments in infrastructure for the successful implementation of the IoT. Companies and leadership teams will also have to reimagine their team dynamics, and that certain existing work barriers between departments, particularly IT and OT, will have to come down for successful adoption and implementation.



The Internet of Things: Is Your Company Ready? cont...

The IoT is here and will be the difference between the “haves” and “have nots”. Whether you’re a large multinational company with significant resources and talents, or a small family-owned company with fewer machines to update and capability to be more agile, there is opportunity for significant growth and cost savings by investing in the IoT. The question that all manufacturers should be asking themselves is, “Are we ready?”