Internet of Things Hard to Define but Critical to Manufacturing

By Eric Wagner, CDME MEP Collaboration Manager

The Internet of Things (IoT) is an emerging term that means different things to different people. At the core, IoT is a very loosely connected network of data collection and transmission systems. This includes cell-phones but also includes sensor systems, cameras, smart vehicles, and a litany of other devices which can communicate to the network. It is estimated that in five years there will be 50 billion connected devices in the IoT.

While IoT sounds futuristic and you believe that it may not impact your business, it is here today and it will impact manufacturing operations and growth in a profound way over the upcoming years. Rockwell Collins, a leading automation company, recently published a report that highlighted the impact of connected devices in the manufacturing industry. According to the report, only 10% of all enterprises are currently using IoT systems for automation. However, in one case study, a manufacturing company was able to utilize Rockwell’s IoT system to double production output without incurring additional costs for operation.

In addition to utilizing IoT to improve manufacturing efficiencies, companies are also utilizing these technologies to significantly increase workplace safety and employee health. The cost to implement these IoT systems within a manufacturing company is lowering daily and can be implemented in a smaller-scale fashion for growing manufacturing

CDME has experience working with IoT systems and automation in manufacturing facilities and is happy to meet with your company to discuss this emerging technology.

For more information on this subject, click the links below.

How the Internet of Things is Transforming Manufacturing - Forbes.com July 2014
The Internet of Things: What it Means for US Manufacturing - PWC.com
The Top 5 Industrial IoT Use Cases - IBM.com April 2017

How are Manufacturers Addressing the “Internet of Things”?

Posted by the Ohio Manufacturers’ Association 4/18/17

The Internet of Things (IoT) is catalyzing the next manufacturing revolution.

The MPI Internet of Things Study, sponsored by BDO, finds that “manufacturers are making headway toward embracing the IoT and improving their readiness—more than half (51 percent), in fact, characterize themselves as IoT-competitive companies, and another 14 percent say they’re IoT leaders.

“Seventy-two percent of manufacturers report the application of the IoT to their plants and processes resulted in an increase in productivity in the last year, while 69 percent report seeing an increase in profitability, with 12 percent reporting increases of more than 10 percent. Looking forward, 60 percent of manufacturers have a strategy in place to apply the IoT to their processes—and 36 percent are already implementing it.”

NIST Extra

Network-of-Things Model Builds Foundation to Help Define the Internet of Things

This article published by National Institute of Standards and Technology (NIST) in July helps us understand the Internet of Things by illustrating examples used in our everyday lives.

Full Article Here

Manufacturers Profiting from the Internet of Things

Small manufacturers are highly encouraged adopt artificial intelligence to make business decisions.
However, manufacturers are overlooking two critical pieces that could de-rail their IoT progress: cybersecurity and R&D tax credits.

The Internet of Things introduces a host of new cyber threats and attack vectors for bad actors, and manufacturers may be leaving money on the table by failing to seek research tax credits.

Partner Events

**Dublin Entrepreneurial Center**
DEC presents: Free Professional Small Business Advice
Every Thursday

**Edison Welding Institute**
Fundamentals of Welding
June 19 - June 23

**Startup Weekend Columbus - Maker Edition**
Techstars Startup Programs
June 23 - June 25
The Columbus Idea Foundry
$0 - $99

**Interact17**
Two-day digital marketing conference
June 12 - June 13
The Ohio Union at OSU
Starting at $175

The MEP program at The Ohio State University is available through the Ohio Development Services Agency (ODSA) to support the National Institute of Standards and Technology's Manufacturing Extension Program.