



# Internet of Things manufacturing: Is it worth the investment?

The Internet of Things (IoT) is often presented as a consumer-focused technology, but using IoT in manufacturing could revolutionize an industry that most consumers never see.

In fact, while smart refrigerators continue to be a few years away from becoming mainstream—just 6 percent of U.S. homes had a smart home device last year, according to a report in *The Economist*—U.S. manufacturers spent \$29 billion on IoT solutions in 2015, according to *BI Intelligence*. Since large players like GE, IBM and Lockheed Martin are backing IoT-enhanced “smart manufacturing,” *BI Intelligence* expects that figure to jump to \$70 billion by 2020.

Driving that momentum is a desire to cut costs. IoT technology promises to improve the efficiency of the manufacturing process by using real-time information from sensors throughout the factory and beyond. It can be hard to separate facts from the hype, though, which makes investing a tough decision.

## Why IoT manufacturing makes sense

Business guru Peter Drucker once mused that “what gets measured gets managed,” and IoT manufacturing is the embodiment of that. In a modern GE battery factory, for instance, sensors monitor the humidity on the factory floor and how much pressure is applied to a particular component, according to a report from *The Washington Post*. Using such data, the company can experiment with variables such as temperature and pressure to maximize efficiency.

### Key takeaways



IoT manufacturing could revolutionize an industry that most consumers never see.



The amount manufacturers spend on IoT solutions is expected to jump to \$70 billion in the next two years.



Determining whether to invest in IoT depends on several factors, including the amount of previous investment, the company and the threat of startup disruption.

Another benefit of IoT manufacturing is preventive maintenance, which employs sensors to alert operators before a part is about to fail. The economic benefits of predictive maintenance can be dramatic; medical equipment manufacturer Medivators saw a 78 percent increase in service events that could be remotely diagnosed and fixed without having to send a field technician, according to *Forbes*.

With IoT, diagnosing problems will be significantly easier. When individual components fail, operators can instantly locate them based on the data they generate.



## So what's the ROI on IoT?

For financial leaders who need to fund manufacturing efforts, there's a clear case for IoT investment. But weighing the cost of upgrading can be difficult. Adding to the confusion and hesitation is the likelihood that the technology you buy today will be out of date in a year or two.

One thing to consider is that many manufacturing companies have already adopted IoT. A Gartner study at the end of 2016 found 43 percent of enterprises worldwide had embraced some form of IoT adoption. In a recent survey from Sphera Solutions, 66 percent of respondents said that funding and building a business case for IoT in manufacturing was the top challenge for adopting the technology.

Determining whether to invest in IoT depends on several factors, including the amount of previous investment, the company (and industry's maturity) and the threat of startup disruption. Since we're projecting into the future, the past can only be so much of a guide.

That's why no matter how many cost-benefit analyses are done, the choice comes down to a gut instinct about the validity of the technology, your fear of disruption and the cost of doing nothing.



## Let's start the conversation.

Working with a strong financial institution, like KeyBank, can help determine if IoT manufacturing makes sense for your business. Contact your relationship manager or visit [key.com/corporate/industry-expertise/industrial-investment-banking.jsp](http://key.com/corporate/industry-expertise/industrial-investment-banking.jsp) for more information.

**KeyBank**   
Use the red key.®

Internet of Things manufacturing: | 2 of 2  
Is it worth the investment?

This document is designed to provide general information only and is not comprehensive nor is it legal advice. If legal advice or other expert assistance is required, the services of a competent professional should be sought. KeyBank does not make any warranties regarding the results obtained from the use of this information. All credit products are subject to credit approval. Rebates are subject to the terms and conditions of the rebate addendum. Key.com is a federally registered service mark of KeyCorp. © 2018 KeyCorp. **KeyBank is Member FDIC.** E91683 0118-344859