

# 2015 **OUTLOOK**

# The Internet of Things (IoT) 2015 Innovation Outlook

Market demands and business requirements for IoT continue to evolve rapidly. Boston Engineering spotlights three important drivers shaping IoT strategies in 2015 and beyond.

### 1) What's Your Strategy for an IoT World?

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IoT enables companies to uncover new market insights by connecting an array of devices and systems - from remote sensors to central enterprise systems, and seemingly every networked product in between. Connecting devices that had been "off the grid" due to technology or cost barriers now bring companies closer than ever to their customers and provide additional data for improved decisionmaking.

Capitalize on IoT by rethinking elements of your business such as:

- A. Embed information technology (IT) in the innovation process: Add IT expertise to collaborate with the rest of your product development team to enhance the customer experience. This includes specifying technology based on industry-specific requirements (e.g., security and wireless standards) and understanding how new IoT features may impact overall product design.
- B. Harvest your data: Collect and analyze your data even if you are only involved in a small aspect of a large process such as manufac-

turing. You may be able to apply trending analysis across your deployed devices to prioritize new product features or provide valuable insights to customers.



C. Develop new business opportunities: Use the power of information to create and strengthen partnerships. For example, a power tools and building products brand could team up with its preferred distributor to send contractors timely alerts when their supplies are running low or receive pricing incentives when they are near a distributor's store.

Harnessing IoT data requires companies to hone their operations from product development through sales to take advantage of new opportunities.

## 2) What's Your Value in the IoT Ecosystem?

IoT dynamics require companies to develop products with standalone offerings that are also indispensable in your customers' broader digital environment. Products that fail to succeed on both fronts are vulnerable to being replaced.

Suppose that a sensor product line monitors temperature and vibration across a suite of manufacturing products. Using IoT, the sensor company can send performance updates to a mobile app that measure the health of individual products and the entire suite. This enables field service to reduce costly unscheduled downtime and increase customer satisfaction by performing maintenance proactively.

Other companies are using IoT to expand their reach. John Deere is beginning to combine data from irrigation systems, soil nutrient readers, and other agriculture information to improve farming

efficiency and yield. The company also monitors the performance of its own equipment.

An IoT roadmap should gauge the value of product capabilities alone and as part of the smart device ecosystem. Also identify where you are vulnerable and plan accordingly.

### 3) What's the Cost of Being Late to IoT?



Early IoT success is fueling optimism that includes projected IoT market growth from \$1.9 trillion in 2013 to \$7.1 trillion globally in 2020, according to industry analyst firm IDC. This prediction speaks to the dramatic increase

in IoT-enabled devices.

That said, many businesses are still conducting their own IoT due diligence. Some companies are expanding their IoT capabilities incrementally by adding services such as remote monitoring and enhanced automation to existing products. However, the value in some market sectors is still hazy. To help chart a course for IoT product development, questions that we ask our clients include:

- How do you know that your product or service is being used the way that you think?
- How can you fulfill unmet customer needs today and tomorrow with IoT?

- How is the competitive landscape shifting? (How could the equivalent of Google's Nest IoT thermostat in your market impact your company?)
- How can you use a specific IoT capability across different applications as market needs shift (e.g., remote sensors)?
- What IoT product development skills gaps do you have, and how do you gain these capabilities quickly and effectively?



When applied correctly, IoT has the ability to transform companies and industries. Appropriate planning and investments today can pay dividends in the future. However, companies that don't reevaluate their strategic course may face considerable headwinds moving forward.

#### About Boston Engineering

Boston Engineering improves the way that people work and live through product innovation and novel engineering. We manage the entire product development process — from ideation to supply chain development. Certified for ISO 9001 and ISO 13485, our industry expertise includes consumer products, defense & security, medical devices, robotics, and industrial & commercial products. We are also the Northeast's largest PTC software reseller.

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