

Five Steps to Optimizing the Industrial Internet of Things (IIoT) to Drive Business Value

Do you know how your customers are currently using your products and how they are actually performing in the field?

Most executives don't. Instead, manufacturers use old information such as service requests and customer anecdotes to create a snapshot of product and market insights.

But this approach relies on historical information and creates blind spots regarding the market landscape.

Eliminate Performance Blind Spots

Industry 4.0 smart, connected technology creates new opportunities to translate product performance data into critical business advantages that include:

- Applying field performance data to prioritize product enhancements
- Identifying new market opportunities (e.g., launch adjacent products or services)

- Gaining new levels of efficiency and responsiveness (e.g., provide sales, marketing, engineering, etc. with real-time customer data)
- Reducing service costs through predictive maintenance

Capitalize on Digital Transformation

The promise of IIoT, or other enterprise platform, can fall short without carefully aligning new capabilities with business goals.

1. Define the business case:

- **What's the value to individual departments** (e.g., quality, compliance, and sales)?
- **What's the overall business value?** This can range from X% reduction in service calls to the opportunity cost of not acting on initiatives

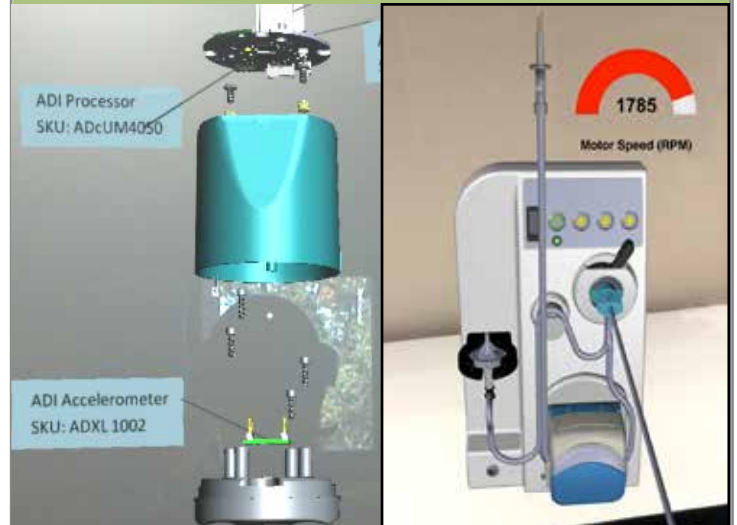
- #### 2. Establish the business process:
- Map how each department would use IIoT insights (e.g., identify who has access to data, how the information will be used – including feedback loops)

The IIoT Lifecycle



IIoT and Augmented Reality Examples

1. Analog Devices: Condition-based monitor maintenance (HoloLens view)
2. Interscope: EndoRotor endoscopy device IIoT performance monitoring
3. LexaGene: Pathogen detection platform IIoT key performance indicators



3. Take a holistic approach to development:

Cybersecurity and business processes are just two key considerations for connected devices:

- **Product engineering:** Align all development areas (mechanical, electrical, software, connectivity) to mitigate risks
- **Data processes:** Ensure your integrated team includes business process and technical systems expertise from product lifecycle management (PLM) to IIoT connectivity, storage, and management

4. Start small:

Launch IIoT in one operation such as service. Then, follow the roadmap to expand

5. Evaluate and calibrate:

Follow ISO and other quality best practices for continual improvement

About Boston Engineering

Boston Engineering provides product design and engineering consulting from concept through commercialization and connectivity. Boston Engineering is also the Northeast's largest PTC software reseller, is a ThingWorx IoT partner, and

is an ANSYS reseller. Certified for ISO 9001 and ISO 13485, the company's industry expertise includes commercial, defense, and medical. Founded in 1995, Boston Engineering is headquartered in Waltham, Mass.



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