Leading the Future of Field Service:
Connecting Field Service Management to the Internet of Things
Kevin Ashton founded the Auto-ID Center at the Massachusetts Institute of Technology, and has done pioneering work in radio-frequency identification and sensor technology.

Ashton is known for coining the term “the Internet of Things” to describe a system where the Internet is connected to the physical world via ubiquitous sensors. In 2015, he spoke at a European customer service conference and noted that field service management is the first industry being transformed by IoT.

Some people in the industry have noted that the entire IoT concept came from trying to solve field service problems in 1999. IoT’s origin story lies in field service management. Clearly, field service management and IoT are deeply intertwined. But how are the changes being implemented? And how can you benefit from them?
4 ways to reduce costs and increase efficiency with IoT

Field service management teams want to keep costs down, while improving their customer service relationships. This can be hard for organizations in any industry—oftentimes, reducing costs hurts customer relationships—but IoT provides a way for field service organizations to achieve this goal.

1. Automation

Before IoT, lack of context and communication led to delays and customer frustration. Automation and IoT represent a huge breakthrough in customer service, enabling organizations to create lasting relationships.

**BEFORE IoT**

- Something needs service
- Customer requests help
- Technician visits site
- Missing context about issue + missing client/vendor information + no prioritization or urgent information
- Technician identifies problem
- Returns in hours or days to fix

**AFTER IoT**

- Something needs service
- Device independently contacts field service agency independently with specific details
- Technician arrives with knowledge and parts to immediately solve the problem
2. Inventory management
IoT-connected devices now signal operations teams and warehouses when they need a new part. Additionally, with mobile technology and connectivity, technicians in the field can connect to the warehouse directly in real time for accurate inventory insights.

GREATEST IMPROVEMENTS FROM MOBILE FIELD USAGE¹

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Improvement</th>
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</thead>
<tbody>
<tr>
<td>65%</td>
<td>Improved customer service</td>
</tr>
<tr>
<td>33%</td>
<td>Faster response to unexpected events</td>
</tr>
<tr>
<td>42%</td>
<td>Increased competition in products and services</td>
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<tr>
<td>29%</td>
<td>Expanded service market (higher volume of service requests)</td>
</tr>
</tbody>
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¹ “The Mobile Technician: The Evolution of the Connection,” 2015, Aberdeen Group
3. Reduced inspections

Devices enabled with self-diagnostic capabilities report on performance, reducing the need for in-person technician visits for inspection. When a service visit is warranted, this allows technicians to arrive with exactly what they need, without a return visit. Reduction in initial and return calls with the correct part, as well as an increase in call efficiency for needed services, enables your technicians to get more done.

**FIELD AGENT RETURN FREQUENCY FOR ON-SITE SERVICE**

- 43% Some of the time
- 19% Rarely
- 12% Most of the time
- 20% All of the time
- 2% Never
- 2% Not sure

For nearly 75% of calls, technicians need a return visit either *some* or *all of the time*.

**REASONS FOR RETURN VISITS**

- Didn’t have the right part/tool required*  40%
- Unable to complete transaction on-site*  35%
- Lack of customer information on-site*  35%
- Ran out of time  29%
- Didn’t have the expertise to solve the issue  15%
- Other  2%

*Indicates situations resolved or avoided by using IoT-connected devices.

2. “Connected Manufacturing Service Report,” 2016, Harris Poll on behalf of Salesforce
4. Redefine “service”
While “Service” once meant fixing ineffective devices, IoT has enabled more proactive use of data for anticipating the needs of customers. By utilizing mobility, cloud technology, and big data to optimize predictive maintenance, service is being redefined by preemptive support.

**TOP PRIORITIES IN SERVICE ORGANIZATION IMPROVEMENT**

45%  
Expanding product and service competition*

40%  
Meeting customer demands*

37%  
Increasing product complexity

33%  
Building a skilled service workforce

30%  
Reducing customer spending

*Potentially IoT-impacted areas of focus.

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The future of IoT in your business

Efficiency increases your bottom line. As IoT becomes the leading driver of increased efficiency in field service management, three major factors will radically change your organization in the coming years:

- Mobile solutions
- IoT
- Big data

Getting on board with these three concepts potentially gives your organization a huge advantage—just like it did for the companies that embraced digital in the early 2000s. Transitioning your organization now could pay off down the road.

IoT has a total potential economic impact of **$3.9 trillion to $11.1 trillion** a year by 2025.⁴

⁴ “The Internet of Things: Mapping the Value Beyond the Hype,” 2015, McKinsey Global Institute
Microsoft Dynamics 365 for Field Service empowers companies to deliver predictive and proactive customer service, first time fix rates, and resource productivity.

To learn more about Microsoft Dynamics 365 for Field Service, visit https://www.microsoft.com/en-us/dynamics365/field-service or call 1-888-477-7989.