Leading the Future of Field Service:

Connecting Field Service Management to the Internet of Things

The future of field service management

Kevin Ashton, a British technology expert, founded the Auto-ID center at the Massachusetts Institute of Technology. That center did pioneering work with radio-frequency identification and other identification sensors. In the process of this work, Ashton also coined the term "Internet of Things" (IoT) to refer to household, everyday objects having network connectivity and sending data. Because of this, some call him the father of the IoT concept.

In late 2015, Ashton spoke at a European customer service conference and noted that field service management is the first industry being transformed by IoT. The father of the idea is saying field service management is the first industry to really start changing because of it—and that's not all.

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?
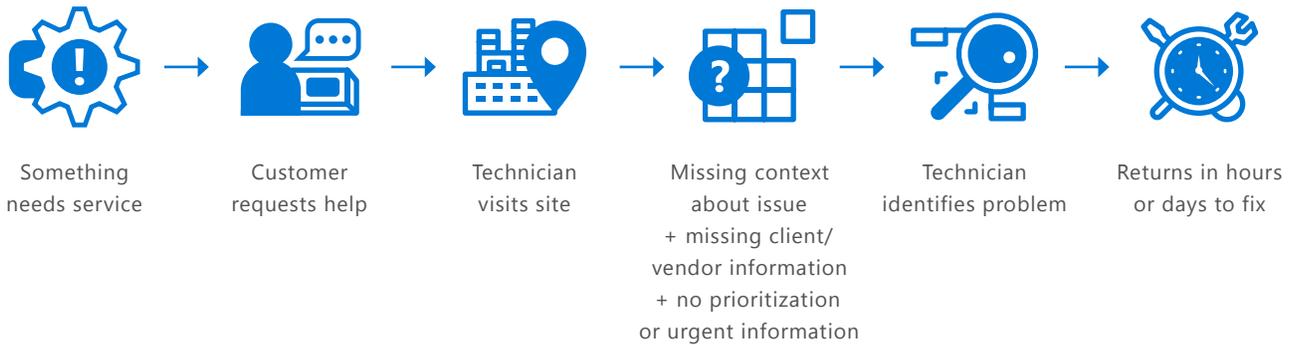
4 ways to reduce costs and increase efficiency with IoT

Field service management teams want to keep costs down, while improving their customer service relationships. That 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.
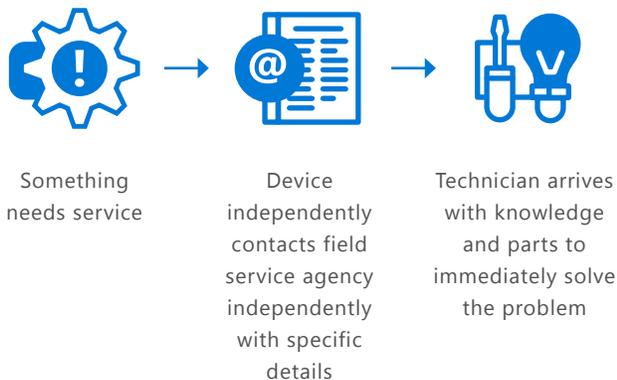
1. Automation

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 USAGE[1]

65%
Improved customer service

33%
Faster response to unexpected events

42%
Increased competition in products and services

29%
Expanded service market (higher volume of service requests)

[1.] "The Mobile Technician: The Evolution of the Connection,"
2015, Aberdeen Group
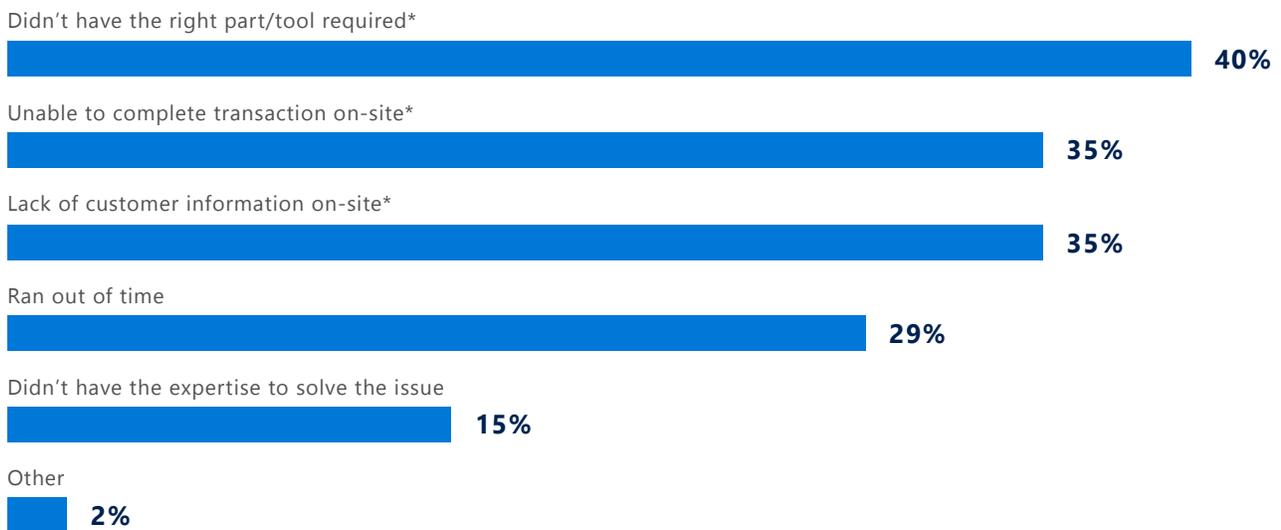
3. Reduced inspections

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[2]

- Some of the time — 43%
- Rarely — 20%
- Most of the time — 19%
- All of the time — 12%
- Never
- Not sure
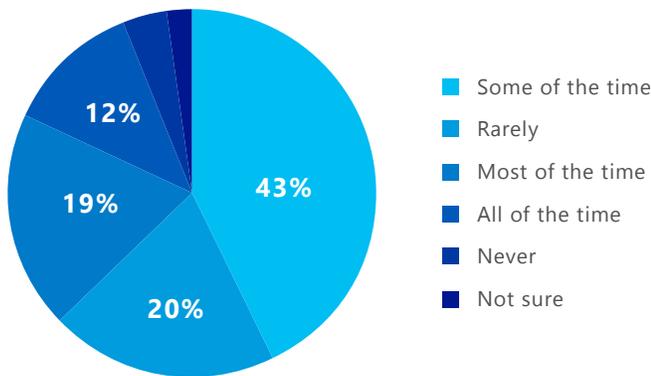
For nearly 75% of calls, technicians need a return visit either *some* or *all of the time*.

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"

"Service" use to mean fixing a broken or ineffective device. But with IoT focused on a proactive approach, it can help anticipate needs and identify things before they become an issue. By utilizing mobility, cloud technology, and big data to optimize predictive maintenance, "service" is now being redefined as providing help before an issue is identified.

TOP PRIORITIES IN SERVICE ORGANIZATION IMPROVEMENT[3]

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.

[3.] "State of Service Management 2015: Connect to Your Customers," 2015, The Aberdeen Group

Prepare your business for IoT integration

How do you maximize IoT benefits in your organization?

Evaluate your options

Evaluate the complete product and service offerings available from different solution providers.

Implement a solution

Choose a company that listens and adapts to your needs, while also providing a suite of products and deep organizational knowledge best suited to help you thrive.

Prioritize first steps

What is most important to you in the first year of embracing IoT: Improving customer relationships? Better routing or inventory management? Determine those steps, and start small to build a solid foundation for the future.

Identify how applications communicate

This will be the core of your IoT success. Are the devices connected enough for the processes necessary for optimal field service operation and client success?

Connect human and software elements

Despite being driven by IoT and automation, you're still in a service-based industry. Technicians must be armed with the necessary support by both the human and automation elements for optimal success.

**Measure and monitor KPIs for continued success**

Define, expand, and monitor key performance indicators (KPIs). Use business intelligence, interconnected systems, and data to uncover opportunities and business insights to stay ahead of the competition in this rapidly changing industry.

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:
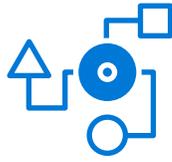
**Mobile
solutions**   **IoT**   **Big data**

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

At Microsoft, we can guide you through the necessary steps, processes, products, and changes in thinking to make IoT a reality for your field service organization.

To learn more about Microsoft Dynamics CRM field service capabilities, visit **www.Microsoft.com/Dynamics** or call **1-888-477-7989.**

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