



Digitally transform your field service:

5 case studies from manufacturing



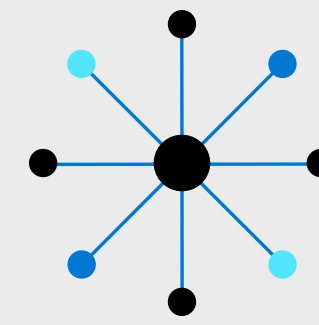
Bring customers closer with connected field service

Manufacturers face evolving customer expectations, thinning profit margins, and increasing commoditization of products. Success depends on differentiated customer experiences. Field service represents a major opportunity to deliver on those needs. However, the traditional model of fixing equipment after it breaks is not sufficient.

A new approach—driven by data, connected to the cloud, and enriched with AI—empowers you to reimagine the place of field service in your business. With Microsoft Dynamics for Field Service, you can mine data for powerful insights, optimize operations, and maximize the value of your technicians' expertise.

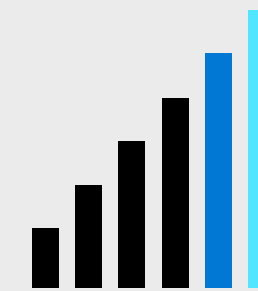
Most importantly, it empowers you to transform relationships with your customers. Using IoT, data, and the cloud, you can understand their needs, deliver faster, more effective solutions, and create services that build long-term relationships and revenue.

Whether you're just getting started with field service or are in the midst of transforming it, Dynamics for Field Service provides a platform for rapid innovation. In this guide, you'll learn about other companies that are using it to create significant new value and stay ahead of the competition. Let's take a look.



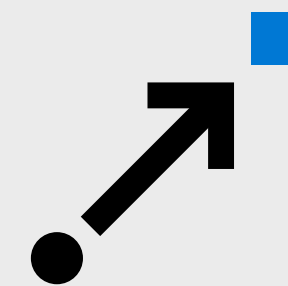
50%

Manufacturers estimate that close to 50% of their products will be smart and connected by 2020¹



32%

percentage point increase from 2014¹



18%

say that they plan to stop manufacturing products altogether and move to a pure service-based business model¹

¹ Capgemini, [Digital Engineering: The new growth engine for discreet manufacturers](#).

What does data-driven field service look like?

In the field, smart scheduling directs the right resources to the right place at the right time. With digital product guides and the ability to consult an expert remotely with mixed reality, technicians solve issues on the first visit. Instead of just fixing problems, technicians can predict and prevent them. And more uptime means happier customers.

Back at the office, employees view, update, and provision connected devices remotely, in real time. Your customer service reps have the latest information and answers at the ready. That same data drives improved R&D and relationship-based sales, bringing connections full circle.

With these capabilities, your field service becomes more efficient, effective, and profitable. It drives the creation of more relevant products and services. Most importantly, it builds relationships that last beyond the sale, keeping your brand front and center.



75% of industrial manufacturers expect delivering services to become a significantly bigger part of their business in the next three to five years.²

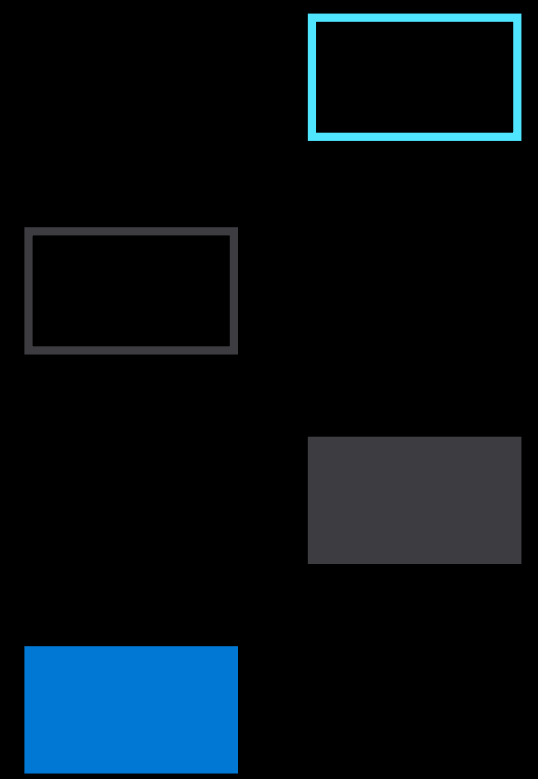
² PA Consulting, [From Products to Services](#), 2017.



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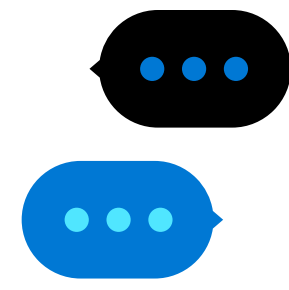
Together with Microsoft, we are on the leading edge, combining our technologies to leverage the Internet of Things and people to help realize business and social innovations in this hyper-connected world.

Ryosuke Mori
Vice President, Global Strategic Alliances
Fujitsu Ltd.



How Microsoft can help

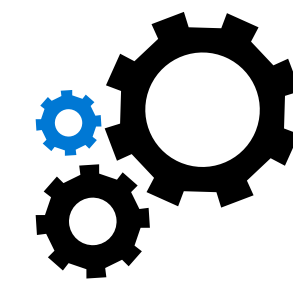
An integrated digital solution delivers the fastest time to value. Microsoft Connected Field Service is built on years of experience working with manufacturing leaders. In these customer stories, you'll learn how companies like yours have made field service a key part of their business model to:



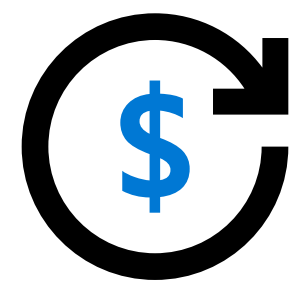
Revolutionize the customer experience: Keep customers informed across the service lifecycle.



Reduce cost to serve: Improve technician productivity and predict maintenance needs.



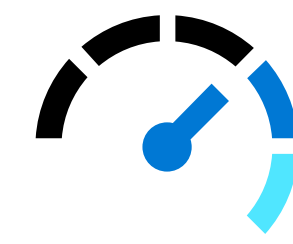
Increase productivity: Use AI, IoT, and mixed reality to guide and inform technicians.



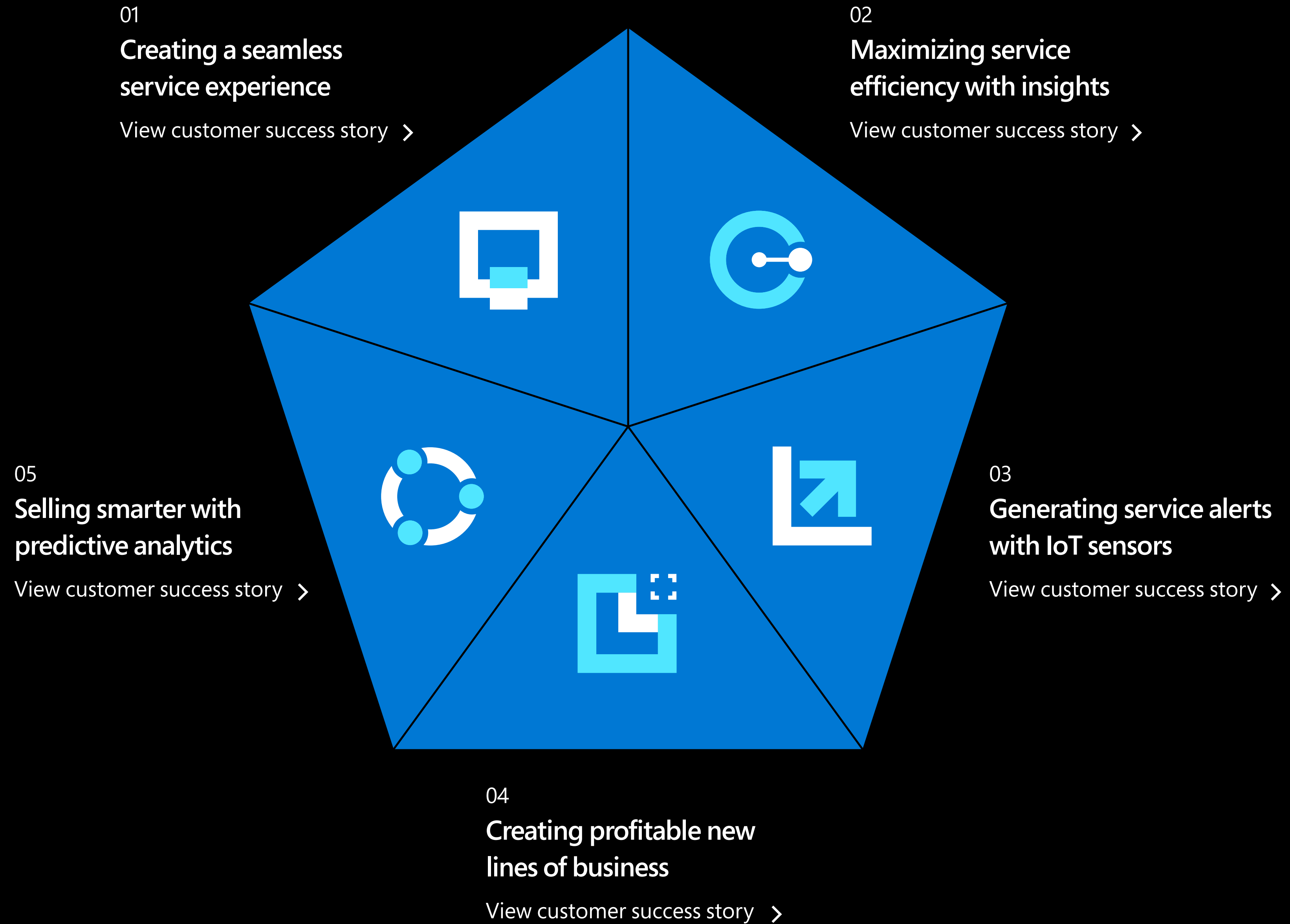
Grow the business: Improve customer satisfaction and topline revenue.



Improve performance: Analyze and enhance field effectiveness to boost profits.



Speed adoption: Deliver immersive, intuitive experiences to shorten time-to-value.





01

Creating a seamless service experience


Dispatch technicians using optimized routes and skills-based assignments and resources.

Michelin extends their premium customer service model to a seamless, on-site customer experience with Michelin OnSite, where they send technicians into the field to perform installations and repairs for customers.





Process



Using Dynamics for Field Service as their customer records system, Michelin schedules availability for their technicians and customer inventory. A self-service customer portal allows customers to choose their tires and an appointment time online, creating an automated process to go from the customer to the technician. Customer records and product information enable technicians to meet customer needs and solve any problems that arise.



Results

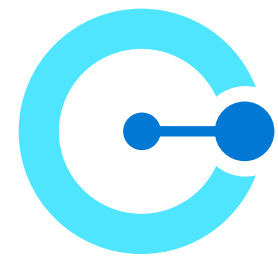
- Created a seamless, automated customer experience from purchase to installation
- Gained greater visibility into inventory and purchase patterns
- Delivered real-time understanding of product availability

[Watch the video](#)

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As we continue to grow and build, the Microsoft platform is going to help us manage the routing and schedule and keep us on top of the customer expectations—that’s critical to our business.

Kevin Doyle
Initiative Leader
Michelin OnSite



02

Maximizing service efficiency with insights


Empower service professionals to make proactive, first-time fixes.

MacDonald-Miller Facility Solutions makes buildings work better. The Seattle-based contractor not only designs and builds energy-efficient buildings, but it also ensures they stay that way through post-build optimization services. Its new connected field service solution identifies when a building's system is using too much energy or about to fail and dispatches service technicians with the right information, tools, and parts needed to make a first-time fix.





Process



The company adopted Microsoft Dynamics 365 for Field Service and Azure IoT services to automate the creation of service tickets based on equipment data. The technician receives a complete repair history from Dynamics 365. All the building health and repair history is pushed into the work order, along with probable fixes and links to necessary maintenance manuals, so the tech can get right to work. If a part needs to be replaced, Dynamics 365 sends a notification to order it. Techs use wearable technology to film and narrate the service procedure. The customer receives the video as confirmation that the repair was completed.



Results

- Offering-time to market of only 60 days
- Average of 10% to 20% energy savings per customer
- Increased efficiency enables more work with the same staff

[Read the case study](#)

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With IoT-enabled Dynamics 365, we learn about—and fix—potential problems before the building maintenance manager or owner even knows they exist.

Bradd Busick
Chief Information Officer
MacDonald-Miller



03

Generating service alerts with IoT sensors

Get instant notifications and alerts about device health to automate service requests.




Ecolab, a leading global provider of water, hygiene, and energy technologies and services, is helping companies worldwide operate more sustainably. Using Microsoft Azure IoT Hub and Microsoft Azure IoT Solution accelerators, combined with Dynamics 365 and data visualization using Power BI, Ecolab receives alerts about inefficiencies within its water production facilities. The company can then respond to these alerts to operate more sustainably and conserve fresh water.

NALCO Water
An Ecolab Company






Process



Within its production facilities, equipment based on Ecolab's Nalco 3D TRASAR™ Technology sends data to a highly secure analytics and storage platform on Microsoft Azure. The technology monitors and controls streams for water-intensive processes and collects and analyzes water usage data in real time. By connecting to thousands of sensors in facilities worldwide, the platform improves efficiency and reduces water, energy, and operational costs.



Results

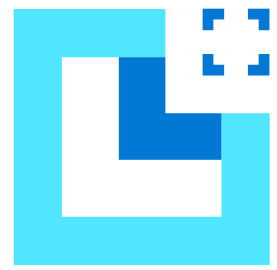
- 
- Delivered real-time sensing data from more than 36,000 water systems
 - Scaled delivery of water management solutions
 - Established operational benchmarks from millions of data points

[Read the case study](#)

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What truly impressed me with our Microsoft collaboration was that it was not about selling us a product. It was about building something and addressing the world's water challenge together.

Christopher Beck
*Executive Vice President and President
Nalco Water, an Ecolab Company*



04

Creating profitable new lines of business

Deliver highly cost-effective product-as-a-service models.

As one of the most iconic airplane engine manufacturers in the world, Rolls-Royce knows how to drive operational efficiency. Now, with Microsoft cloud services, they can stream telemetry directly from aircraft engines through Microsoft Azure's rich IoT services, use machine learning to analyze that data, and implement predictive maintenance through Dynamics for Field Service, and transform Rolls-Royce from selling engines to a highly profitable end-to-end service.





Process

From using Azure Data Factory for orchestration and Azure HDInsight for high-level data aggregation and summarization, to Azure SQL and Azure Blob Storage for handling its different storage needs, Rolls-Royce is taking full advantage of integrated Azure platform services. Using Microsoft Cortana Intelligence Suite, Rolls-Royce will be able to analyze rich sets of data and perform data modeling at scale to accurately detect operational anomalies and help customers plan relevant actions.



Results

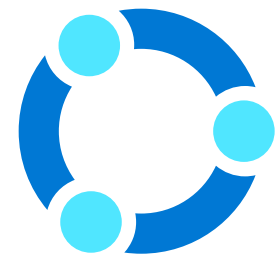
- Predictive maintenance improves profitability
- Data feeds back into product development to improve future offerings
- Enabled customers to increase fuel savings

[Read the case study](#)

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Our goal is not data for the sake of data, but to embrace the cloud and analytical technologies to deliver more expert insights to the right stakeholders at the right time.

Nick Farrant
Senior Vice President
Rolls-Royce



05

Selling smarter with predictive analytics

Equip technicians with sales data so they can take advantage of cross-selling and upselling opportunities.

Sandvik Coromant, part of the Sandvik Group, is a global engineering organization that produces machining tools and systems for manufacturing. Sandvik Coromant's employees bring years of cross-industry knowledge to the customer relationship, but those experts can't be everywhere at once. That's why the company digitized its knowledge so it can be available throughout the business. By incorporating these best practices into intelligent analytics, data provides intelligent feedback to augment human capabilities and automate critical processes.





Process

The predictive analytics manufacturing solution uses Microsoft Azure IoT Hub and Microsoft Azure IoT solution accelerators. An in-house shop floor control tool collects machining and tool data. Microsoft Azure analyzes it in real time using machine learning algorithms from Cortana Intelligence. Using Azure Machine Learning and Streaming Analytics, the solution can adjust equipment, notify technicians when maintenance is needed, and alert plant managers of a potential failure. Technicians even have access to sales data so they can recommend equipment and service upgrades.



Results

- Emergency shutdown decision-making time reduced from 2 seconds to 100 milliseconds
- Customers now get instant feedback
- Millions of dollars in cost savings
- Future selling opportunities uncovered

[Read the case study](#)

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With this solution we are able to reinvent the art of manufacturing. Tools, machines, processes working together, all the way from the customer to the sales interaction, helping us deliver an unprecedented level of field service.

Klas Forsström
President
Sandvik Coromant

Connect your field service operations at speed and scale

Learn how you can improve manufacturing intelligence with connected field service.

Get started

Reimagine field service with Microsoft, your innovation partner. With Dynamics 365 for Field Service, HoloLens, and the scale and power of Azure, you can make your field service a customer experience powerhouse.

- Do more with an end-to-end platform, from your cloud infrastructure to the intelligent edge.
- Protect data and build customer trust with comprehensive security and the broadest compliance certifications.
- Leverage a global partner network that ensures you always have experienced innovators on your side.

