

■ THE FIRST ANNUAL

AI in Field Service Report

EXPLORING THE TRANSFORMATIVE POTENTIAL OF
ARTIFICIAL INTELLIGENCE IN FIELD SERVICE

The First Annual AI in Field Service Report

Exploring the Transformative Potential of Artificial Intelligence in Field Service



Research Contact:
Chris Rand
Research Manager, WBR Insights
Chris.Rand@wbresearch.com



Written by:
Mike Rand
Content Director, rand&rand

Be Honest—What Do You Think of Our Reports?

Help us improve—take our **42-second survey** (Yes, we timed it!) for a chance to win a redeemable reward.

TAKE THE SURVEY

Copyright © 2023 WBR Insights | All Rights Reserved

The non-branded editorial content that appears in this report is owned and distributed by WBR Insights. Distribution of this content is restricted to only WBR Insights and any sponsors of this report represented herein.

■ Table of Contents

- 3 EXECUTIVE SUMMARY**
- 4 ABOUT THE RESPONDENTS**
- 6 KEY INSIGHTS**
- 8 FIELD SERVICE ORGANISATIONS WILL INCREASE THEIR AI INVESTMENTS**
- 10 AI DELIVERS REDUCED COSTS, FASTER RESOLUTIONS, AND MORE FIRST-TIME FIXES**
- 13 MANY FIELD SERVICE ORGANISATIONS PLAN TO LEVERAGE THIRD-PARTY SPECIALISTS FOR AI IMPLEMENTATION**
- 14 CONCLUSION: HOW AI WILL CHANGE FIELD SERVICE IN THE NEXT THREE YEARS**
- 15 KEY SUGGESTIONS**
- 17 ABOUT THE AUTHORS**
- 18 ABOUT THE SPONSORS**



■ Executive Summary

Artificial intelligence (AI) has the potential to completely revolutionise field service. It is already making inroads in areas like scheduling, data analysis, self-service, and more.

According to ZDNET, 80% of high-performing field service organisations are already using AI.¹ As field service is becoming a critical driver of business growth, applications of AI could significantly improve service outcomes and customer satisfaction.

This report explores the transformative potential of AI in field service. It will delve into how companies are currently using AI for scheduling, routing, data analysis, customer service, and even self-service, while also revealing what field service teams are planning for the future of the technology.



¹ Afshar, Vala. "AI improves field service quality and customer experience." ZDNet. January 19th, 2023. <https://www.zdnet.com/article/ai-improves-field-service-quality-and-customer-experience/>

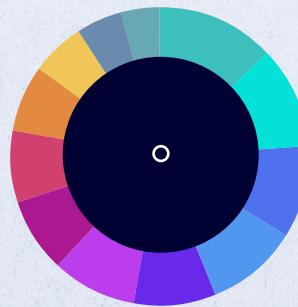
■ About the Respondents

The WBR Insights research team surveyed 100 leaders from companies across Europe to generate the results featured in this report.

The respondents represent field service organisations in a variety of verticals, including medical and scientific devices (13%), information and communication technology (11%), construction and industrial (10%), manufacturers, (10%), and heavy equipment (9%), among others.

A significant portion of the respondents (41%) represent companies that make more than \$10 billion in annual revenue. Another 38% are from companies that make \$1 billion to \$10 billion in annual revenue.

What best describes the area in which your organization provides service?

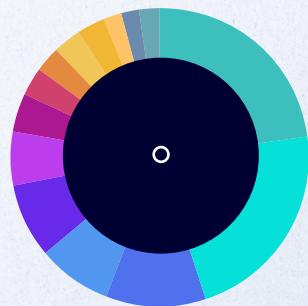


■ 13%	Medical & Scientific Devices
■ 11%	Information & Communication Technology
■ 10%	Construction & Industrial
■ 10%	Manufacturing
■ 9%	Heavy Equipment
■ 9%	Semiconductors
■ 8%	Transportation
■ 8%	Utilities
■ 7%	Appliances & Electronics
■ 6%	Enterprise Network Equipment
■ 5%	Commercial Computers
■ 4%	Domestic Computers

What is your company's annual revenue (USD)?

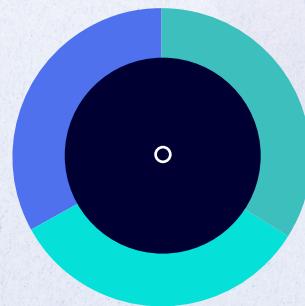


In which country is your company's headquarters?



23%	Germany
22%	United Kingdom
11%	France
8%	Sweden
8%	Italy
6%	Switzerland
4%	Austria
3%	Spain
3%	Belgium
3%	The Netherlands
3%	Finland
2%	Portugal
2%	Denmark
2%	Norway

What is your role?

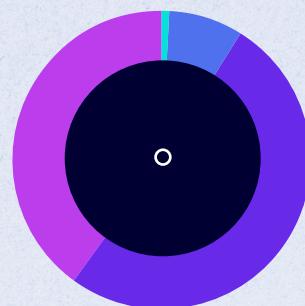


34%	IT
33%	Field Service
33%	Operations

Most of the companies represented in the study are headquartered in Germany (23%), the UK (22%), or France (11%). The remaining companies are headquartered in other European countries, including Sweden (8%), Italy (8%), and Switzerland (6%).

The respondents occupy roles in IT (34%), field service (33%), and operations (33%).

What is your seniority?



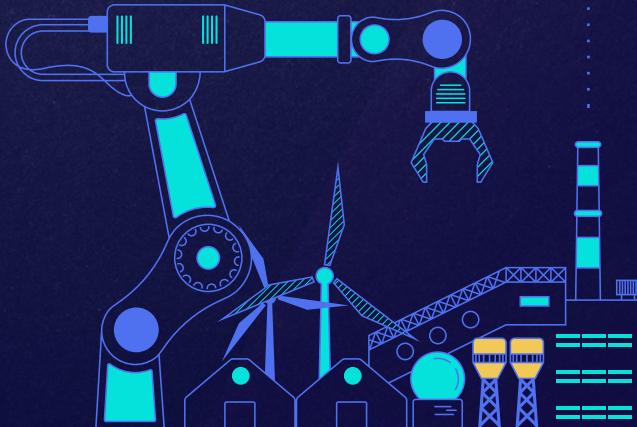
1%	C-Suite
8%	Vice President
51%	Department Head
40%	Director

At 51%, a slight majority of the respondents are department heads. The remaining respondents are directors (40%), vice presidents (8%), and C-suite executives (1%).

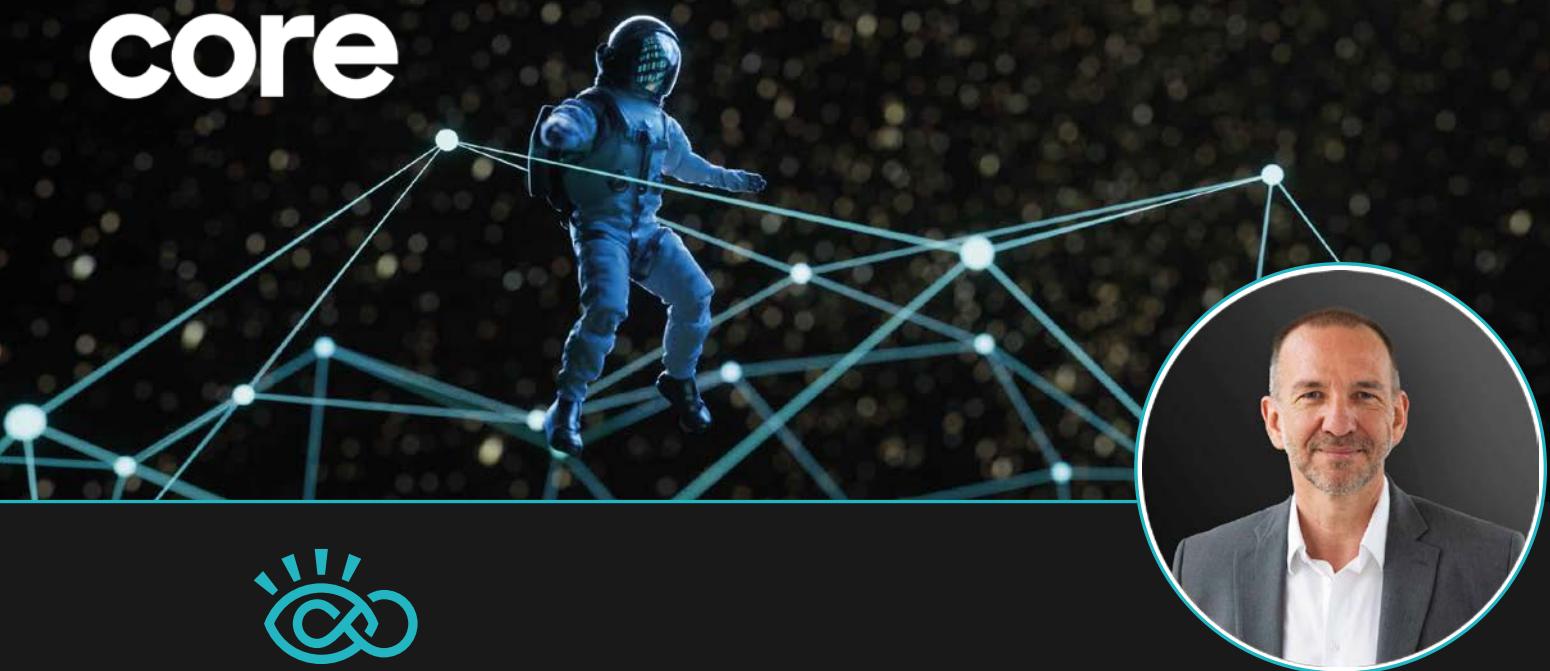
■ Key Insights

AMONG THE RESPONDENTS:

- **65%** are only somewhat satisfied with their current applications of AI in field service—24% are not very satisfied.
- **71%** say their investments in AI will increase in the next 12 months.
- Most respondents are already using AI for data analytics (**66%**), predictive and prescriptive maintenance (64%), scheduling and routing (62%), and job prioritisation (61%).
- Most respondents will implement AI for knowledge support (**56%**), onsite visit prevention (51%), training (58%), and self-service capabilities (58%) in the next 12 months.
- **72%** claim they've experienced more first-time fixes thanks to implementing AI in field service—59% say they've experienced reduced overall costs and 57% say they've experienced faster resolutions to maintenance issues.
- **68%** believe AI will help them reduce labour costs in the next 12 months.
- **48%** believe AI will help them optimise parts inventory, while 47% believe it will help them achieve real-time data visibility.
- **52%** say lack of data quality and 51% say legacy integration are challenges they've experienced in implementing AI.
- **45%** say they already work or will work with outside AI specialists to implement AI in their field service processes. Only 35% have developed or will develop their AI capabilities internally.
- **42%** have automated 25% to 49% of their field service appointment scheduling and planning processes. Another 29% have automated half of these processes.



core



InsightLoop

Are you ready to revolutionize your service operations with Insightloop? Real-time service data and AI-driven analytics provide you with deep, actionable insights into your service processes.

Unleash your service organization's full potential, boost your efficiency, and enhance customer experiences like never before.

Ready to take the next step toward service excellence? Get started with Insightloop today and experience the transformation firsthand.

www.insightloop.com

«AI is a real game changer in the service industry. At Rolls-Royce Power Systems we're excited and prepared to embrace the possibilities together with Coresystems.»

Jörn Lindstädt, Vice President Global Service

Coresystems AG
www.coresystems.ch

Use the power of generative AI to solve your pain points and optimize every stage of your process – before, during and after the service.



Service Request
Self-Service Assistant
for clients & agents



Planning
Task estimations &
spare parts prediction



Field Work
Catalog of root causes
& supporting documents



Documentation
Automatically
generated reports

■ Field Service Organisations Will Increase Their AI Investments

Artificial Intelligence (AI) is increasingly becoming a game-changer in various industries. One such sector where AI's influence is growing exponentially is field service operations, especially among European companies.

AI is already transforming field service in areas such as scheduling, routing, data analysis, and customer self-service. By harnessing the power of complex algorithms and machine learning, AI provides an unprecedented level of accuracy and efficiency in these areas.

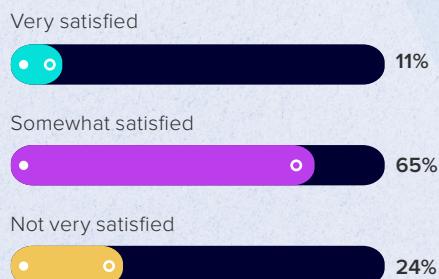
Nonetheless, most European field service organisations are still in their preliminary implementations of artificial intelligence. Most of the respondents (65%) say they are only somewhat satisfied with their organisations' current applications of AI in field service. Almost one-quarter (24%) say they are not very satisfied.

As we will learn, AI has already produced significant benefits for these organisations, but many field service leaders don't believe the technology has reached its full potential.

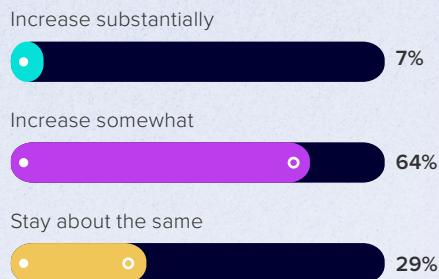
To address this, European companies are investing a significant amount of capital into AI discovery and implementation, and those investments are set to increase over the next 12 months.

Specifically, 64% of the respondents say their AI investments will increase somewhat, while 7% say their investments will increase substantially.

How satisfied are you with your organization's current applications of AI in field service?



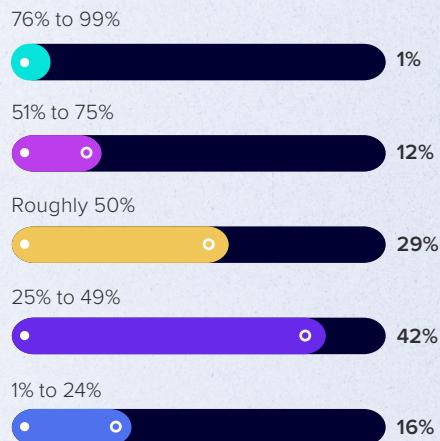
How will your organization's investments in AI change over the next 12 months?



This suggests that companies are in a race to leverage AI to its fullest potential. Although most of the respondents say they are planning only modest increases to their investments, there is a significant chance of escalation if those initial investments yield significant improvements to operations.

One initial AI investment that is already starting to yield results is automated appointment scheduling and planning. Although only 41% of the respondents have automated roughly 50% or more of their processes, another 42% have already automated 25% to 49% of their scheduling processes. These numbers are likely to increase as field service organisations get comfortable with AI and realise additional time and cost savings benefits.

How much of your field service appointment scheduling and planning processes have you already automated?



Field service teams are also already using AI for capabilities like data analytics (66%), predictive and prescriptive maintenance (64%), routing (62%), and job prioritisation (61%). These are fundamental applications for companies that must manage significant field service fleets, in-house technicians, and third-party contractors.

On the horizon, leaders are planning to integrate AI into other areas of field service, mainly to reduce costs and improve outcomes for customers. For example, most of the respondents plan to implement AI in the next 12 months for enhanced diagnostics purposes (56%), onsite visit prevention (51%), and customer self-service (58%).

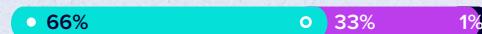
Most (58%) also plan to implement AI for training purposes. AI-based training can help reduce the time and cost needed to train new employees, while also providing more personalised and effective learning experiences.

Overall, AI is becoming a critical force in field service. With the help of AI, field service organisations can reduce costs, enhance customer experiences, and maximise the efficiency of their operations.

In which of the following areas of field service is your organization currently using AI, and in which are you planning the implementation of AI in the next 12 months?

- We are already using AI in this area.
- We will implement AI in this area in the next 12 months.
- We have no plans to implement AI in this area in the next 12 months.

Data analytics



Predictive/prescriptive maintenance



Scheduling and/or routing



Job prioritization



Customer service (e.g., AI-powered chatbots)



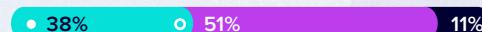
Inventory management (e.g., parts usage prediction)



Enhanced diagnostics (e.g., knowledge support, prediction of required spare parts)



Onsite visit prevention



Training



Self-service (e.g., AI-powered troubleshooting)



■ AI Delivers Reduced Costs, Faster Resolutions, and More First-Time Fixes

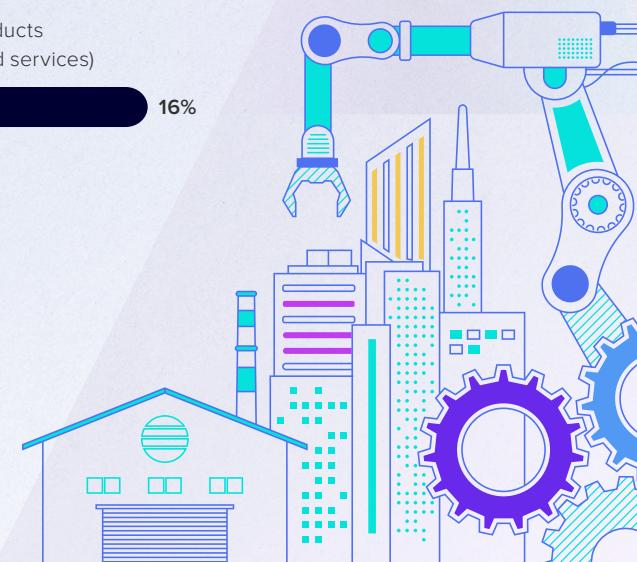
As mentioned, AI has the potential to deliver critical benefits to both customers and field service organisations. Often, these benefits take the form of cost savings, faster resolutions, and more first-time fixes.

For example, AI can help optimise routing and scheduling for service calls by leveraging real-time data from mobile devices and IoT sensors to identify the most efficient paths for technicians and the best schedule times. This helps field organisations save time and money on fuel costs while also providing customers with shorter wait times.

Predictive analytics can anticipate problems before they happen, allowing technicians to be proactive in addressing issues. This significantly reduces downtime for customers while saving resources by preventing unneeded visits.

Most of the respondents have already realised benefits like more first-time fixes (72%), reduced overall costs (59%), and faster resolutions to maintenance issues (57%) thanks to their implementations of AI. Significant portions of the respondents have also witnessed more accurate data analytics (37%) and improved resource allocation (24%).

Which of the following are benefits you've experienced since implementing AI in field service?



Moving forward, European field service teams plan to implement AI to achieve other goals, some of which have long been an issue in field service.

For example, 68% of the respondents hope to reduce labour costs over the next 12 months with the help of AI. Labour shortages have long been an issue for field service teams. According to the European Commission, “Persistent labour shortages are found in a diverse range of occupations across all skill levels. They are particularly prevalent in construction, healthcare, science, technology (notably ICT), engineering and mathematics (STEM.) Looking ahead, shortages in both high-skilled and low-skilled occupations are expected to continue as the population ages and the green and digital transitions advance.”²

It's expected that AI-powered automation will help significantly reduce those costs.

Our study also revealed some of the respondents' key intentions for the technology. They plan to use AI to optimise parts inventory (48%), achieve real-time data visibility (47%), and overcome supply chain constraints (46%). Reaching these goals could considerably improve customer satisfaction while simultaneously cutting costs.

In addition to cost-cutting, AI has the potential to significantly improve revenue through the field service sector. Researchers asked the respondents to describe how they believe AI will play a role in driving new revenue through field service.

Field service leaders largely view the integration of Artificial Intelligence (AI) as a conduit for new revenue streams, primarily through cost reduction and enhanced service efficiency.

With which of the following goals do you believe AI will help over the next 12 months?

Reducing labor costs



Optimizing parts inventory



Achieving real-time data visibility



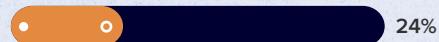
Overcoming supply chain constraints



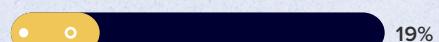
Eliminating data silos within the organization



Recruitment and/or onboarding



Organizational transformation
(e.g., outsourcing, nearshoring)



AI is seen as a tool that can revolutionise operations, cutting down on overheads, and making processes more cost-effective. The potential for substantial cost avoidance and savings is repeatedly emphasised in conversations with the respondents, with AI touted as a pivotal player in reducing the budget required for field service in the future.

Another common theme among the respondents' views is the belief in AI's ability to enhance service quality and the customer experience, which could indirectly drive revenue. Leaders see AI as a mechanism to improve accuracy in field jobs and client need understanding, enabling a more personalised and valuable service offering.

² “Commission report finds labour and skills shortages persist and looks at possible ways to tackle them.” European Commission. June 7th, 2023. <https://ec.europa.eu/social/main.jsp?langId=en&catId=89&furtherNews=yes&newsId=10619>

Its potential to streamline job prioritisation, improve first-time fix rates, and provide a solutions-oriented approach is also important to the respondents, indicating a shift towards a more client-centric model.

Interestingly, some leaders propose the idea of using AI to redefine the pricing model for field service. According to these leaders, AI could facilitate more accurate pricing strategies, potentially allowing for differential pricing for in-person visits and virtual assistance. Furthermore, AI's potential for predictive maintenance could support the introduction of subscription-based service models, creating a new avenue for revenue growth.

However, a small subset of leaders expressed scepticism about AI directly generating new revenue. These leaders primarily view AI as a tool for service support, cost reduction, and efficiency improvement rather than a direct revenue driver. They foresee fewer chances for new revenue generation, despite acknowledging the significant role AI could play in transforming the performance capabilities of field service operations.

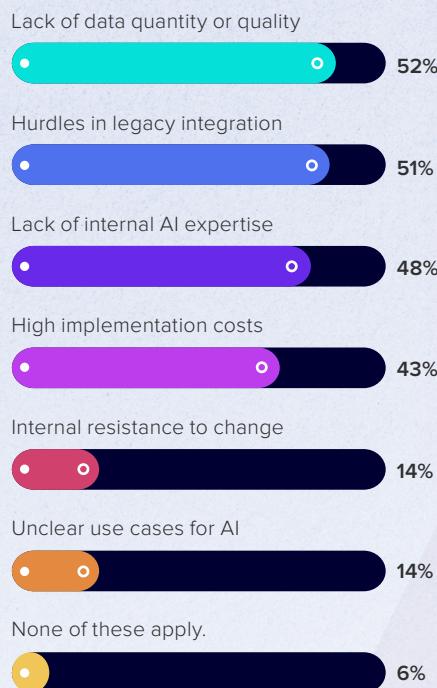
Overall, AI is proving to be a powerful tool for field service teams in Europe, helping them reduce costs while optimising their operations and providing better outcomes for customers. As more companies invest in the technology, it's likely that these benefits will only increase in the future.

However, many European field service organisations still face challenges in implementing AI.

Most of the respondents say lack of data quantity or quality (52%) as well as hurdles in legacy integration (51%) are challenges they've experienced in implementing AI. Significant portions of the respondents have also struggled with a lack of internal AI expertise (48%) and high implementation costs (43%).

To address these challenges, European field service organisations can turn to outside suppliers, service providers, and consultants for AI solutions. Already, many companies recognise the potential of artificial intelligence and are willing to invest in obtaining the necessary expertise.

Which of the following are challenges you've experienced in implementing AI in your field service organization?



■ Many Field Service Organisations Plan to Leverage Third-Party Specialists for AI Implementation

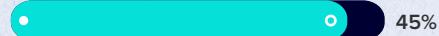
Third-party AI specialists can offer field service organisations expertise in data analytics, predictive maintenance, implementation, optimisation, and other critical areas. This helps companies get up to speed quickly with their AI initiatives while avoiding the expense of hiring full-time employees for the same purposes.

Almost half of the respondents (45%) say they plan to work with outside AI specialists to implement AI in their field service processes. Only 35% say they have developed or will develop their AI capabilities internally, while another 20% say they are planning to only use AI features as part of a field service management (FSM) solution that they've already implemented.

Working with AI specialists could help field service teams overcome the challenges outlined in the previous section of this report while also providing a greater degree of customisation for their AI solutions. This is particularly important since European companies often have unique regulatory requirements and customer preferences that need to be considered when designing an AI solution.

What is your strategy to implement AI in your field service processes?

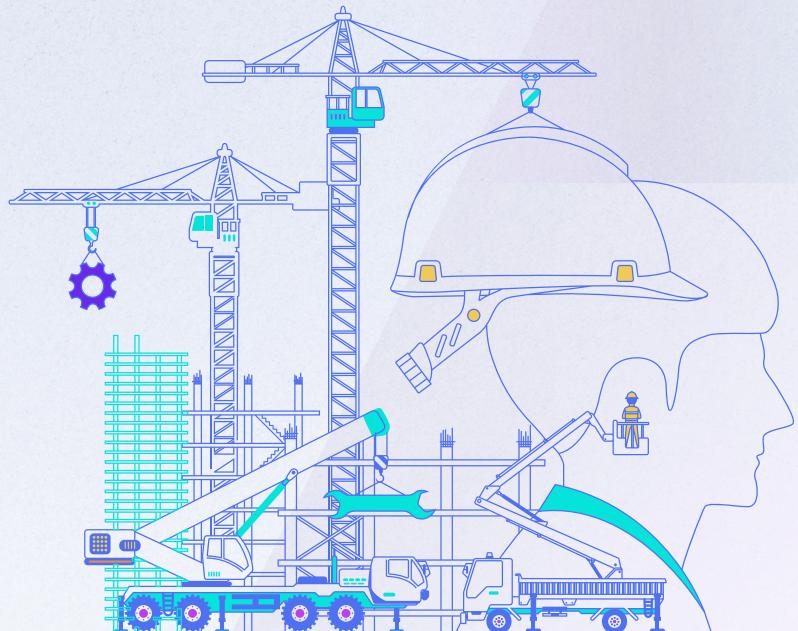
We work or will work with outside AI specialists.



We have developed or will develop our AI capabilities internally.



We use or will use features in a field service management (FSM) solution we have already implemented.



■ Conclusion: How AI Will Change Field Service in the Next Three Years

To reveal high-level trends of AI technology in field service, researchers asked the respondents how they believe artificial intelligence will change field service over the next three years. Overall, European field service leaders anticipate that AI will make their operations faster, more accurate, and more sustainable.

Predictability and precision are key areas where AI is expected to make a considerable impact. Field service leaders believe that AI will enhance predictability in operations, enabling field service technicians to take the right actions at appropriate times. The potential for AI to minimize human error and bring it close to zero is also highlighted, potentially reducing service volume as much as 40%, according to one respondent.

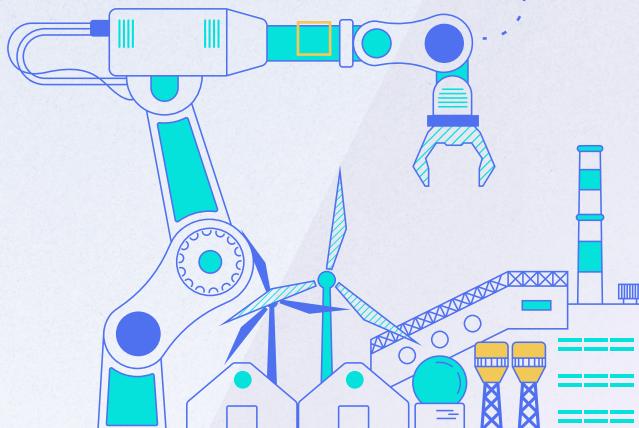
Moreover, the integration of AI is expected to enhance the sustainability of field service operations. This illustrates an expectation that AI will facilitate a more energy and cost-efficient processes, significantly reducing the environmental impact of field service activities. The prospect of AI reducing the need for in-person visits is also an aspect contributing to this viewpoint.

In terms of data handling and knowledge generation, AI is poised to play a pivotal role. European leaders envision AI transforming field service into a robust information hub, enabling the generation of deeper insights and better future visibility.

This, coupled with the anticipation of AI facilitating better knowledge generation capabilities, underscores the potential of AI in elevating the quality of insights in field service.

Finally, AI is foreseen to bring about a more personalised and customer-centric approach to field service. Leaders predict that AI will empower field technicians to deliver superior field experiences and personalised services. The possibility of AI establishing better connectivities between field service, various departments, and individual work sites is also envisaged, anticipating an era of more efficient data transfer and improved service quality.

In summary, the consensus among European field service leaders is that AI will cause a fundamental shift in field service operations over the next three years, making them more predictive, sustainable, insightful, and customer-centric.



■ Key Suggestions

Identify specific use cases for AI based on your company's goals and objectives.

This could include tasks like data analysis, scheduling, routing, customer service, and more.

Invest in AI-powered solutions to optimise field service operations.

Given the significant potential of AI in enhancing predictability, reducing costs, and improving customer satisfaction, deploying AI solutions should be a top priority for field service organisations. This could result in faster, more accurate service delivery, and higher customer satisfaction rates.

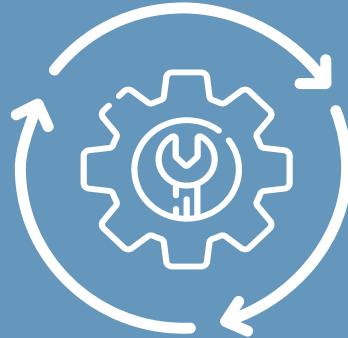
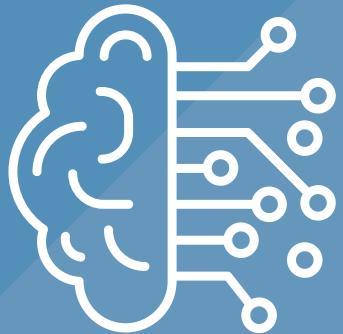
Overcome data challenges by partnering with third-party AI specialists.

Lack of data quantity and quality, as well as hurdles in legacy integration, pose significant challenges for AI implementation. Collaborating with AI specialists can mitigate these issues. These specialists possess the expertise to manage data-related issues and streamline the AI integration process.

Prioritize sustainability in field service operations.

With AI's potential to reduce the environmental impact of field service activities, sustainability should be a key consideration in field service operations. The potential of AI to reduce in-person visits and optimise operations could lead to more environmentally friendly practices.





SMART SERVICE AUTOMATION

FIELD SERVICE MANAGEMENT BY GMS DEVELOPMENT

GMS Development provides AI based solutions to automate field service processes for large enterprises. Our solutions can be used to cover the entire field service process or integrated modular oder or be modularly integrated into existing SaaS platforms like Salesforce, SAP or Microsoft.



WWW.GMS-DEVELOPMENT.COM

FIELD SERVICE EXCELLENCE

■ About the Authors

INSIGHTS

Worldwide Business Research



WBR Insights is the custom research division of Worldwide Business Research (WBR), the world leader in industry-driven thought-leadership conferences. Our mission is to help inform and educate key stakeholders with research-based whitepapers, webinars, digital summits, and other thought-leadership assets while achieving our clients' strategic goals.

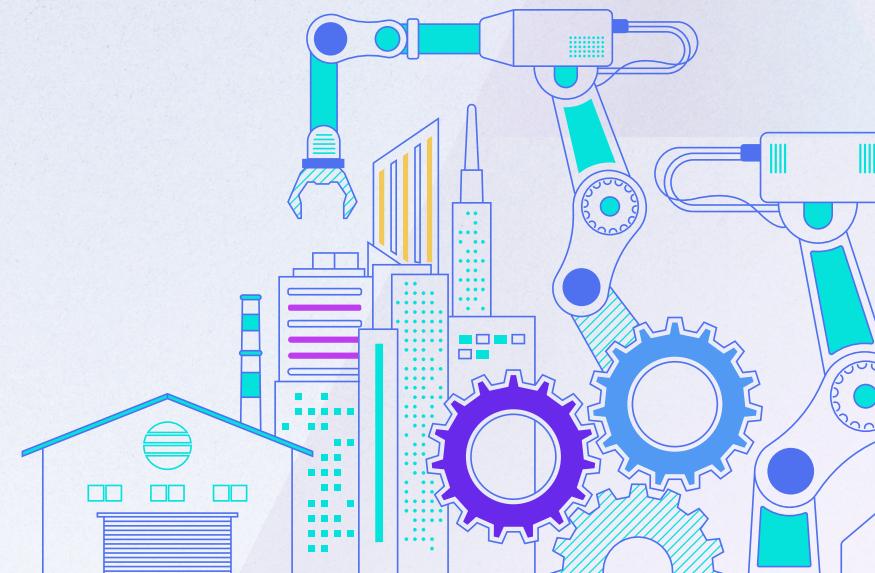
For more information, please visit wbrinsights.com.

FIELD SERVICE

Field Service is where 350+ cross-industry European service, support and customer success executives come together to build world-class operations.

With industry-leading, forward-looking content, Field Service is designed to help you achieve service excellence and profitability.

For more information, please visit fieldserviceeu.wbresearch.com.



■ About the Sponsors

core

Since 2006, Coresystems has been a driving force in field service management, delivering innovative solutions that shape the industry's future. As pioneers, now we harness the power of AI and Machine Learning to offer organisational insight tools, setting our sights on becoming the number one provider in this domain.

Our advanced platform enables clients to save costs. Our clients will improve their service performance by transforming data into actionable insights. Harnessing a company's existing data and modern machine learning, we empower businesses to optimise their operations by identifying issue root causes before the technician arrives on site.

At Coresystems we focus on proactive problem-solving and spare parts optimisation, helping clients streamline their processes and enhance efficiency. By understanding each client's unique needs, we offer solutions to achieve measurable results and elevate their competitive advantage.

Join us in revolutionizing the industry with cutting-edge technology, expert knowledge, and a steadfast commitment to excellence. Together, let's redefine the industry and unlock new potential for your organisation's growth and success.

For more information, please visit www.coresystems.ch.

GMS

GMS Development stands for high-performance, innovative Field Service applications. Some of the world's best-known companies rely on our solutions to offer their customers excellent service. Our customers are convinced by the unique characteristics of our highly user-friendly, individually customizable service components. With more than 30 years of expertise in the service business and an array of thoroughly practice-tested tools behind us, we plan and implement even the most demanding projects quickly and reliably.

For more information, please visit gms-development.com.

