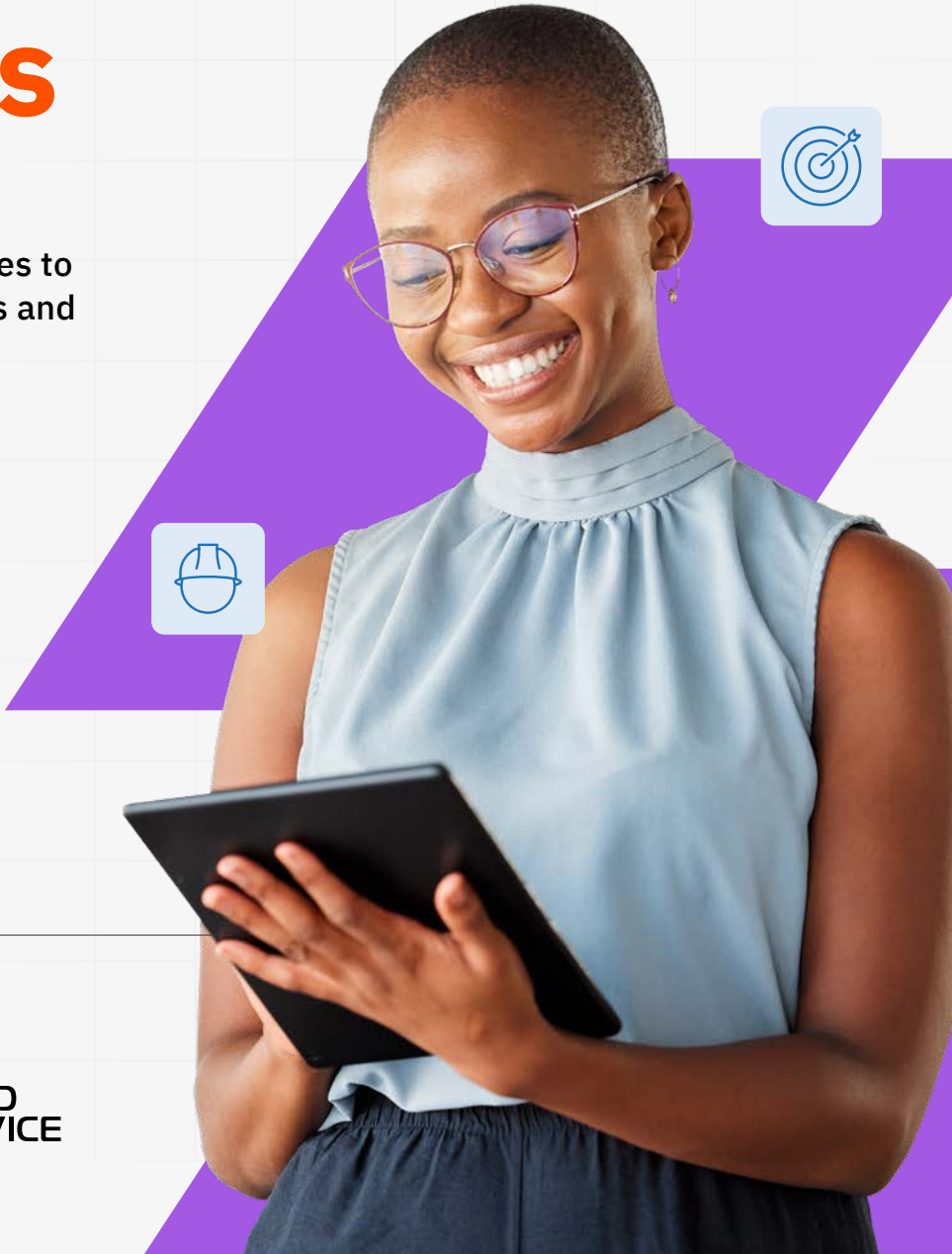
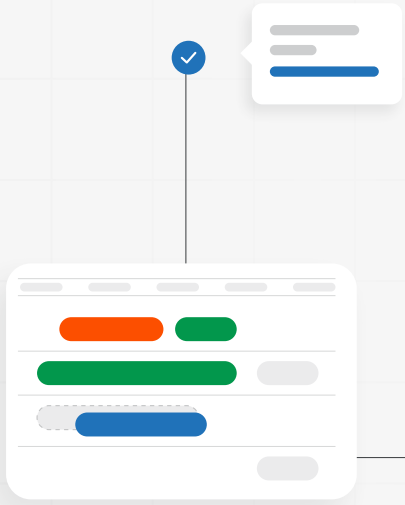
ZUPER™

Optimizing Field Service Operations with AI and FSM Solutions

How Field Service Leaders Will Leverage the Latest Technologies to Streamline Back-end Processes and the Customer Experience





INSIGHTS
Worldwide Business Research

FIELD SERVICE

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Executive Summary

This report explores the current landscape and future outlook of Artificial Intelligence (AI) and Field Service Management (FSM) software within the field service industry. Based on a survey of 100 field service leaders, the report reveals that a significant majority of respondents (85%) are preparing to increase their investments in AI technologies in the next two years. Furthermore, 73% of survey participants are either planning to adopt a new FSM solution or enhance their existing FSM systems within the forthcoming 12 months.

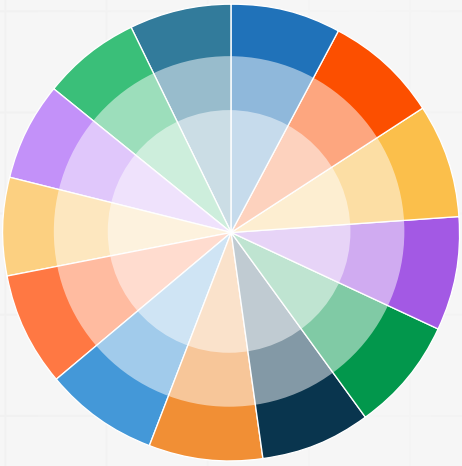
The findings highlight field service teams' strategic pivot towards leveraging AI and FSM for improving operational efficiencies, predictive maintenance, resource optimization, and enhancing customer experiences. Moving forward, field service leaders and technicians will use these technologies not just as tools for backend optimization but also as catalysts for transforming customer interactions.

85% of respondents are preparing to increase their investments in AI technologies in the next two years.

About the Respondents

The WBR Insights research team spoke with 100 leaders from field service operations across the U.S. and Canada to generate the results featured in this report.

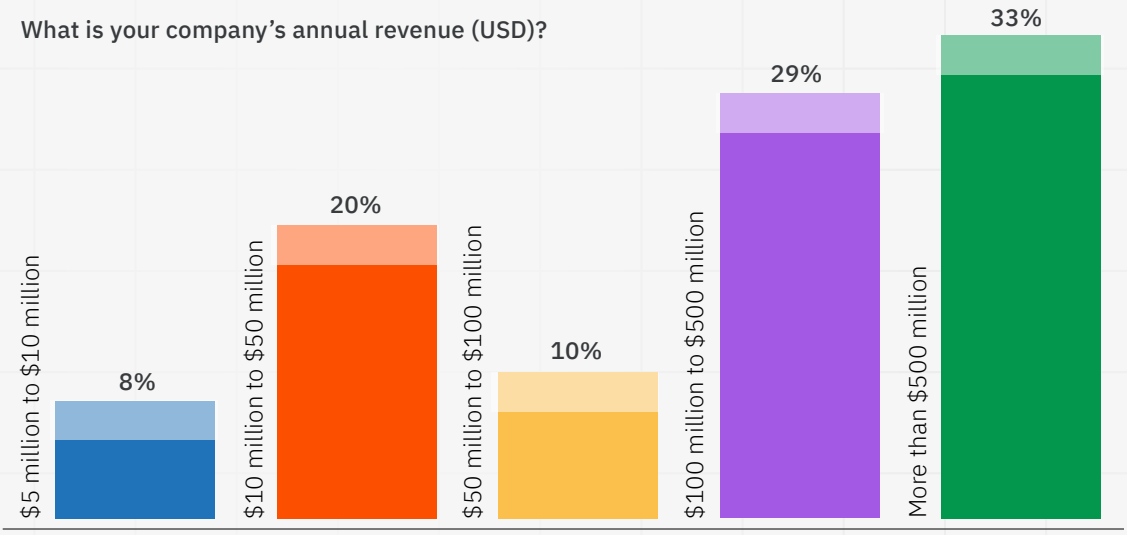
What best describes the area in which your organization provides service?



- 8% Commercial Computers
- 8% Construction & Industrial
- 8% Enterprise Network Equipment
- 8% Heavy Equipment
- 8% Information & Communication Technology
- 8% Medical & Scientific Devices
- 8% Semiconductors
- 8% Transportation
- 8% Utilities
- 7% Appliances & Electronics
- 7% Domestic Computers
- 7% Manufacturing, Discrete – Equipment, Durable Goods
- 7% Manufacturing, Process – Consumables, Non-Durable Goods

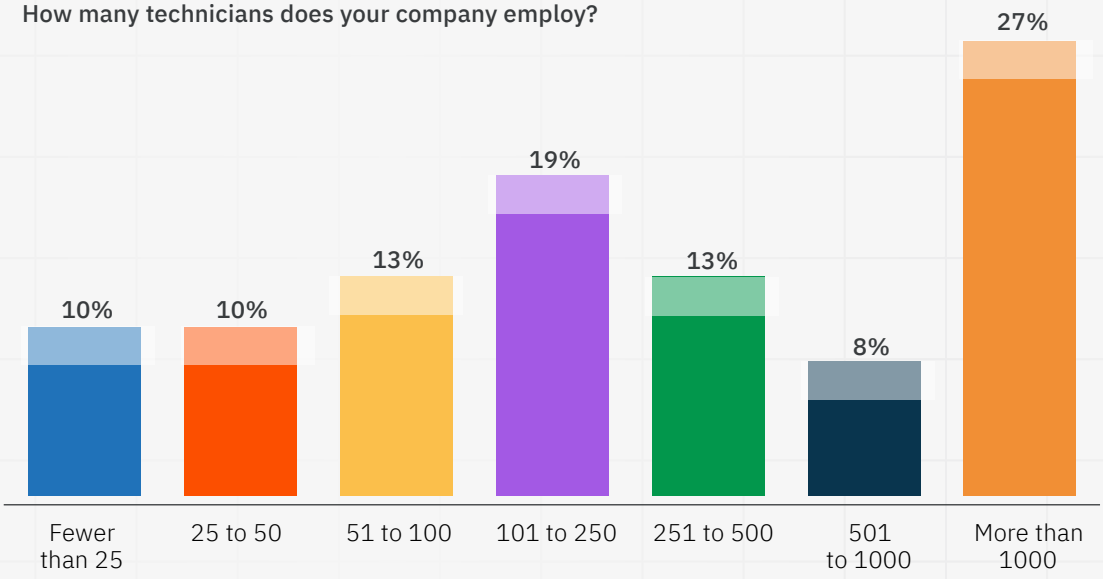
The respondents represent companies operating in a variety of verticals, including commercial computers (8%), construction and industrial (8%), enterprise network equipment (8%), heavy equipment (8%), and information and communication technology (8%), among others.

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



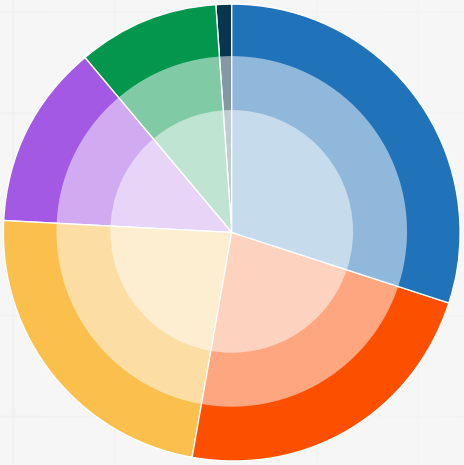
At a total of 62%, most of the respondents come from companies that make $100 million or more in annual revenue.

How many technicians does your company employ?



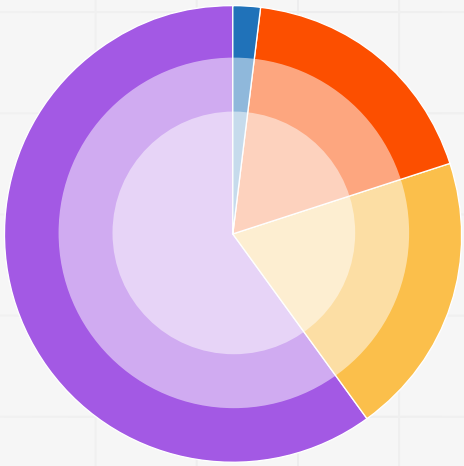
The companies represented in the study vary in size, as measured by how many technicians each company employs. However, more than one-fourth of the respondents (27%) are from companies that employ more than 1,000 technicians.

What is your role?



- **30%** Operations
- **23%** Inventory/Logistics/Spare Parts
- **23%** IT
- **13%** Field Service
- **10%** Depot Repair
- **1%** Safety

What is your seniority?



- **2%** C-Suite
- **18%** Vice President
- **20%** Department Head
- **60%** Director

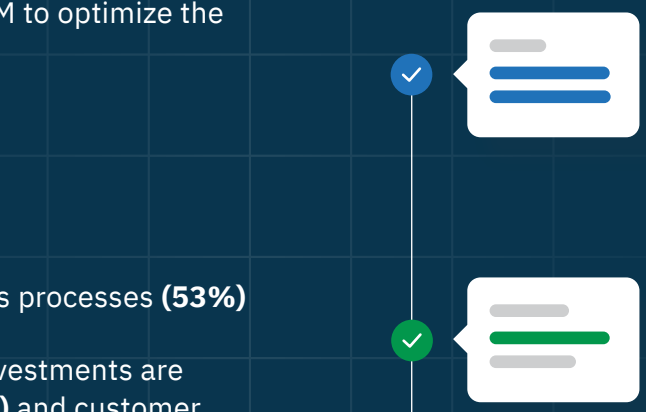
The respondents occupy roles in operations (30%), inventory and logistics (23%), IT (23%), field service (13%), depot repair (10%), and safety (1%).

Most of the respondents are directors (60%). The remaining respondents are department heads (20%), vice presidents (18%), or C-suite executives (2%).

Key Insights

Among the respondents:

- **82%** currently use a field service management (FSM) solution.
- **36%** of those who currently use an FSM are not very satisfied (23%) or not satisfied at all (13%) with their current solutions.
- **73%** will adopt a new FSM or make changes to their current FSM within the next 12 months.
- A majority believe it is very important for this FSM to optimize the following operations:
  - Work order management **(83%)**
  - Compliance and safety **(83%)**
  - Spare parts and inventory management **(72%)**
  - Technician productivity **(65%)**
  - Integration with financial systems and business processes **(53%)**
- Their top two priorities in terms of technology investments are inventory and parts management software **(36%)** and customer relationship management (CRM) software **(36%)**.
- **75%** say their investments in AI technologies will increase somewhat over the next two years, while **10%** say they will increase substantially.
- A majority will use AI for the following purposes:
  - Predictive maintenance **(65%)**
  - Resource allocation optimization **(57%)**
  - Automated scheduling and routing **(53%)**
  - Customer service **(51%)**

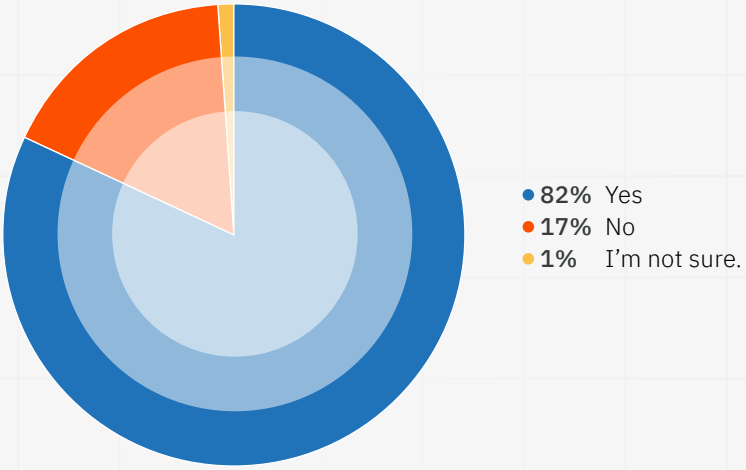


Most Field Service Teams Will Acquire or Augment an FSM in the Next 12 Months

The field service management landscape is experiencing a significant transformation, driven by organizations' need for better optimization of core processes, including inventory management, cost management, and the customer experience. However, there is a growing dissatisfaction among users with their current FSM solutions.

This dissatisfaction highlights the urgent need for solutions that are not only technologically advanced but also user-friendly, cost-effective, and capable of integrating with existing systems.

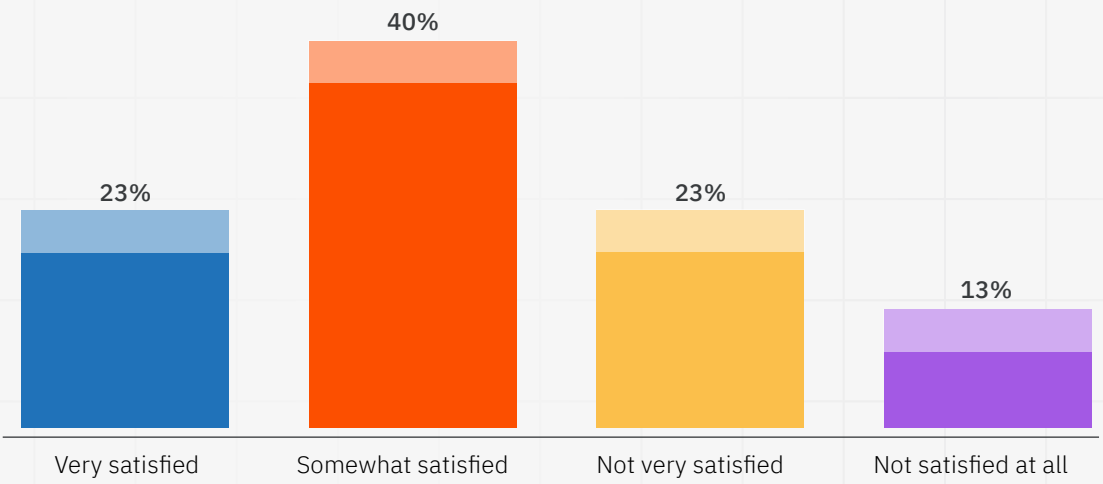
Does your organization currently use a field service management (FSM) solution? A Field Service Management (FSM) solution is a comprehensive software system designed to manage and coordinate field operations, including scheduling, dispatching, service delivery, resource tracking, and more.



The survey reveals that a significant majority of companies (82%) have implemented a Field Service Management (FSM) solution.

Nonetheless, satisfaction levels indicate room for improvement. Specifically, 40% of these respondents say they are only somewhat satisfied with their solutions. Similarly, 23% are not very satisfied and 13% are not satisfied at all with their chosen FSM solutions.

How satisfied are you with your current FSM?



While the adoption of FSM technology is widespread, these satisfaction levels suggest that current solutions may not fully meet the needs or expectations of their users. This disconnect might stem from various factors, such as usability issues, lack of specific functionality, or integration challenges with existing systems.

For field service operations, this underscores the importance of not only adopting technology but also choosing the right solution that aligns with their specific operational needs and improving user training and support to increase satisfaction levels.

Researchers sought to clarify what challenges these respondents face that are making them unsatisfied with their current FSM technologies, so they asked the respondents to describe the major causes of their dissatisfaction.

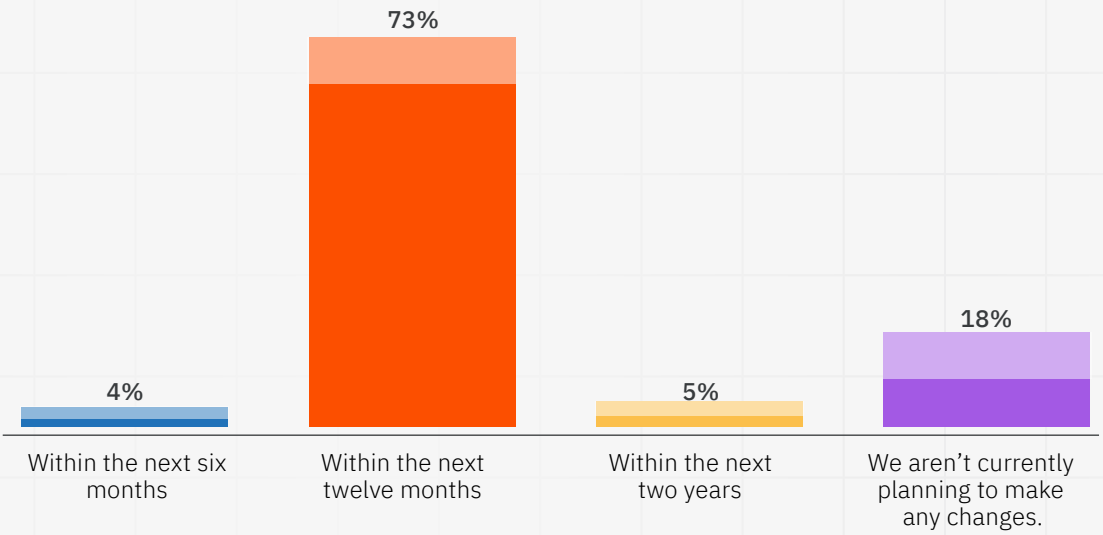
The core issues highlighted by respondents regarding their current solutions focus on user-friendliness, insufficient customer support, technical glitches, and poor value for money.

A significant number of users find their software complex and not intuitive. Just to be able to use their software, they've had to invest in a significant amount of training for their teams, which is both time-consuming and inefficient.

Complaints about the lack of responsiveness and expertise from customer support teams are also recurrent. This suggests that there is a gap in service from solution providers. As a result, users are left struggling with technical issues and must wait extended periods to find answers to their questions.

Finally, multiple respondents feel that their current tools do not deliver adequate value for their cost, with features that do not meet expectations for the price paid. These grievances indicate a strong desire among users for more streamlined, user-friendly solutions that offer better support, functionality, and value.

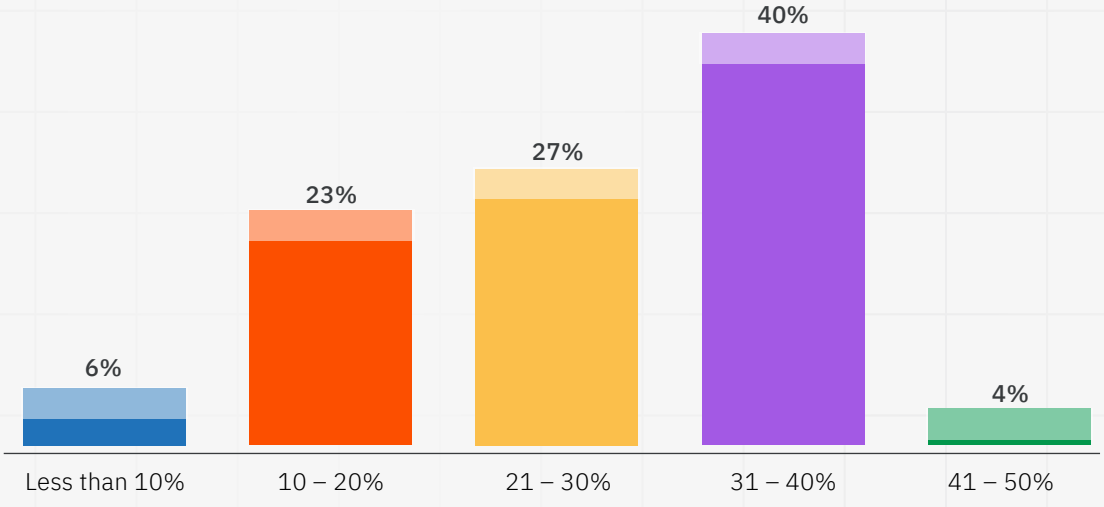
How soon is your organization planning to adopt a new FSM, make changes to your current FSM, or make changes to similar software you are using if you are not using an FSM?



In light of these challenges, 73% of the respondents say they plan to adopt a new FSM, make changes to their current FSM, or make changes to similar software within the next 12 months, regardless of whether they currently use an FSM. Only 18% of the respondents have no plans to make any changes.

Notably, 89% of the respondents who aren't currently using an FSM plan to adopt one in the next twelve months. The remaining 11% will adopt one in the next two years. Although a significant number of teams aren't satisfied with their current solutions, most field service leaders agree that FSM software is now critical to business operations.

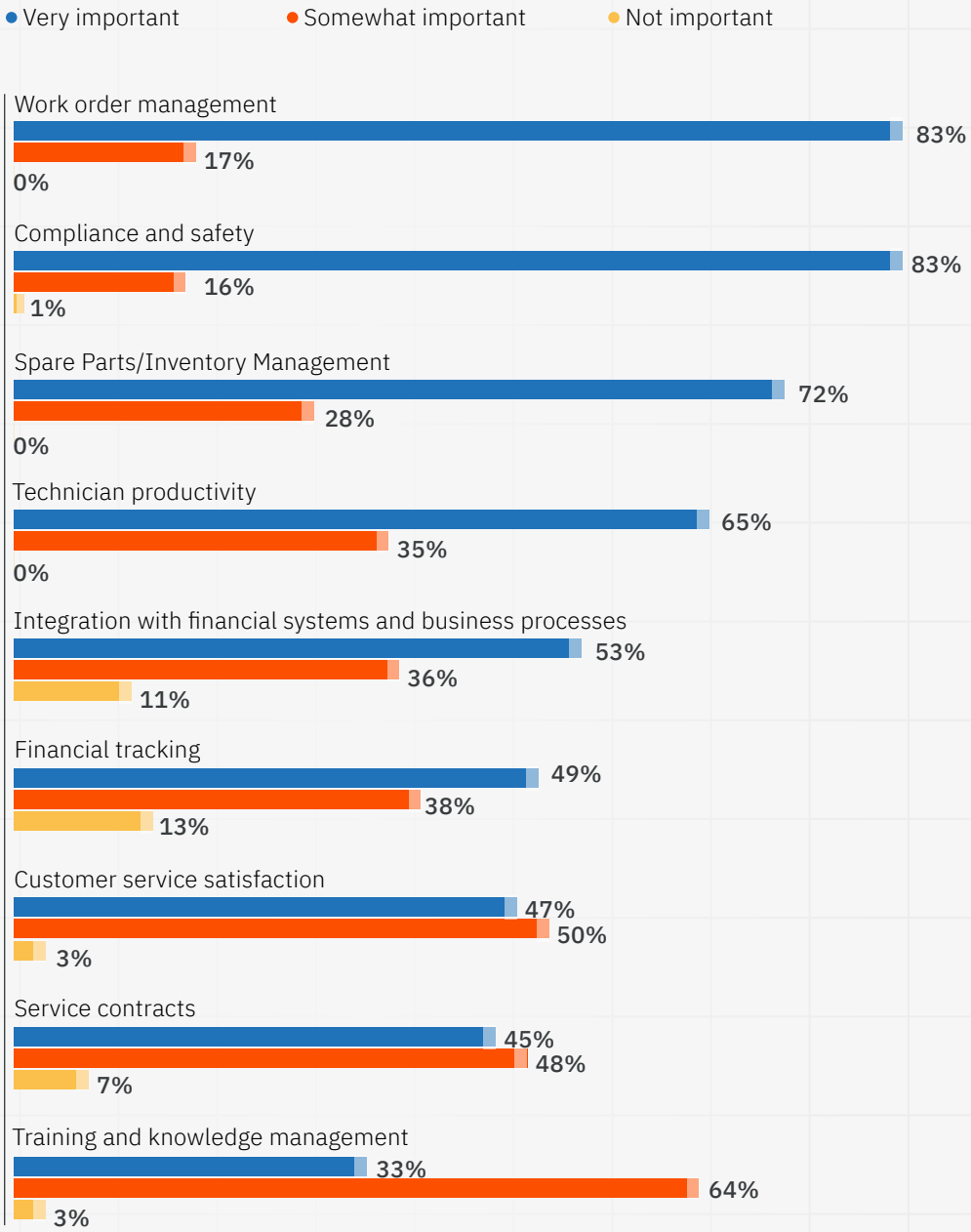
Since you said you're planning to adopt a new FSM, make changes to your current FSM, or make changes to similar software you are using if you are not using an FSM within the next six months, twelve months, or two years, what percentage of your technology budget do you anticipate you'll invest in these changes?



Companies that are planning to adopt a new FSM or make changes to their current technology are planning on making substantial investments to do so. For example, 40% of these respondents say they will invest 31% to 40% of their technology budgets in these changes. Another 4% say they will invest 41% to 50% of their technology budgets.

This suggests that functional and comprehensive FSM technology is a priority at these organizations, even as other groundbreaking technologies like AI are becoming important. These investments are not just a nod to the continuing digitization of field service. They also point to a strategic move among field service operations to treat field service as a strategic operation and a potential revenue generator.

How important is it for your FSM—or similar software you are using if you are not using an FSM—to be able to optimize the following operations?



The respondents will also prioritize specific optimizations when selecting new FSM software or other solutions to augment their existing technology stacks.

In each case, a majority of respondents believe it is important for their FSM to be able to optimize five of nine operations—work order management (83%), compliance and safety (83%), spare parts/inventory management (72%), technician productivity (65%), and integration with both financial systems and business processes (53%).

Nonetheless, there are some differences in optimization priorities between companies that currently use FSM technology and those that don't. All the respondents who aren't currently using an FSM say it is very important that their solution optimize work order management, compared to 83% among all the respondents.

Field service teams struggle to manage their work orders when they don't have current technology that supports them through automation. Meanwhile, the importance placed on spare parts management, inventory management, and technician productivity points towards an ongoing effort to minimize downtime and enhance service delivery.

Finally, the integration of technologies with financial systems and business processes, though less prioritized, indicates a growing acknowledgment of the need for seamless operational connectivity to drive overall business growth.

100% of the respondents who aren't currently using an FSM say it is very important that their solution optimize work order management.

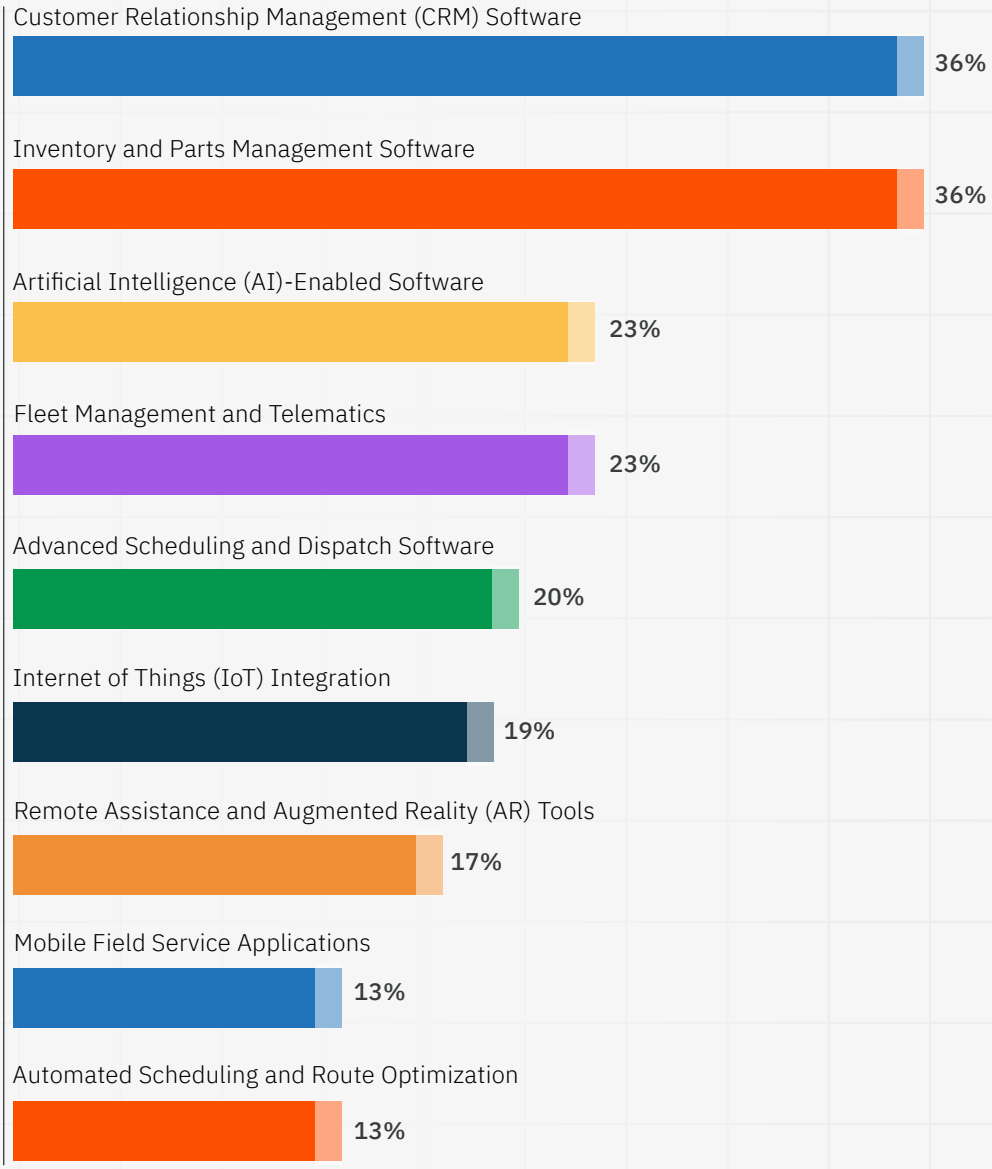
Inventory Management, Customer Experience, and Artificial Intelligence Are Top Technology Investments

Technology has quickly become a linchpin for success in field service operations. Organizations are increasingly recognizing the significance of investing in cutting-edge tools to enhance efficiency, improve service delivery, and boost customer satisfaction.

As such, field service management software has emerged as not only a necessary tool but also as a vital asset for companies looking to stay competitive. This software streamlines traditional manual processes and automates key tasks, leading to improved workflows, streamlined communication, and enhanced decision-making.

However, field service management software alone won't make up field service teams' future technology stacks.

Which of the following are your top two priorities in terms of technology investments?



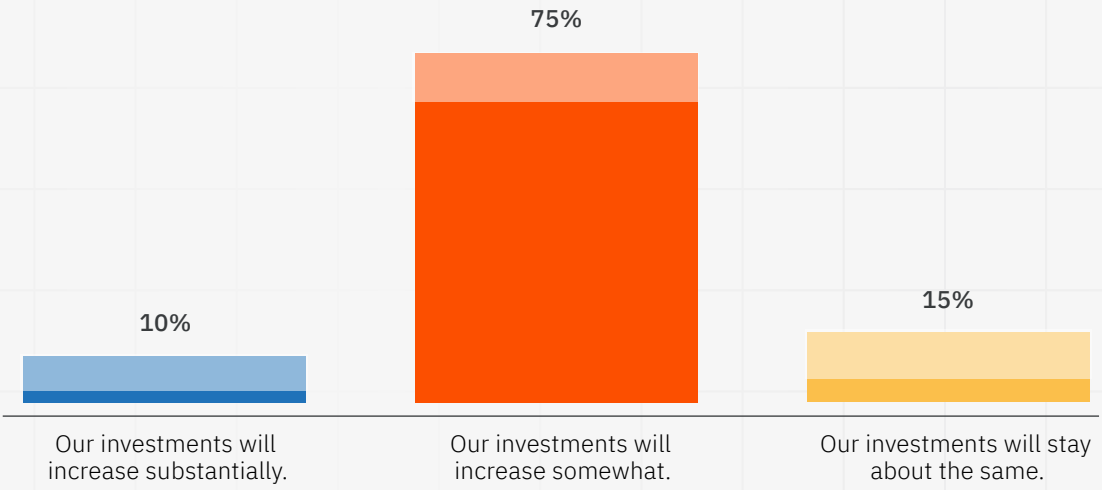
The respondents' top two priorities in terms of technology investments are inventory and parts management software (36%) and customer relationship management software (36%). These findings align with previous results from the study, which found that 72% of the respondents consider spare parts and inventory management optimization very important in an FSM.

The top two priorities in terms of technology investment among the respondents who don't currently use an FSM are Internet of Things (IoT) integration (39%) and advanced scheduling and dispatch software (33%). However, the top two priorities in terms of technology investments among the respondents who currently use an FSM are customer relationships management software (39%) and inventory and parts management software (38%).

Companies that already use FSM software may prioritize enhancing customer relationships and improving inventory management because they have already seen the benefits of automating core processes. Now, they are looking for ways to enhance enhance customer service, so they can differentiate their field service offerings from competitors.

On the other hand, companies without FSM software may prioritize advanced technologies like IoT integration and scheduling and dispatch software because they need more solutions to automate internal processes and improve overall operations.

How will your investments in AI technologies change over the next two years?



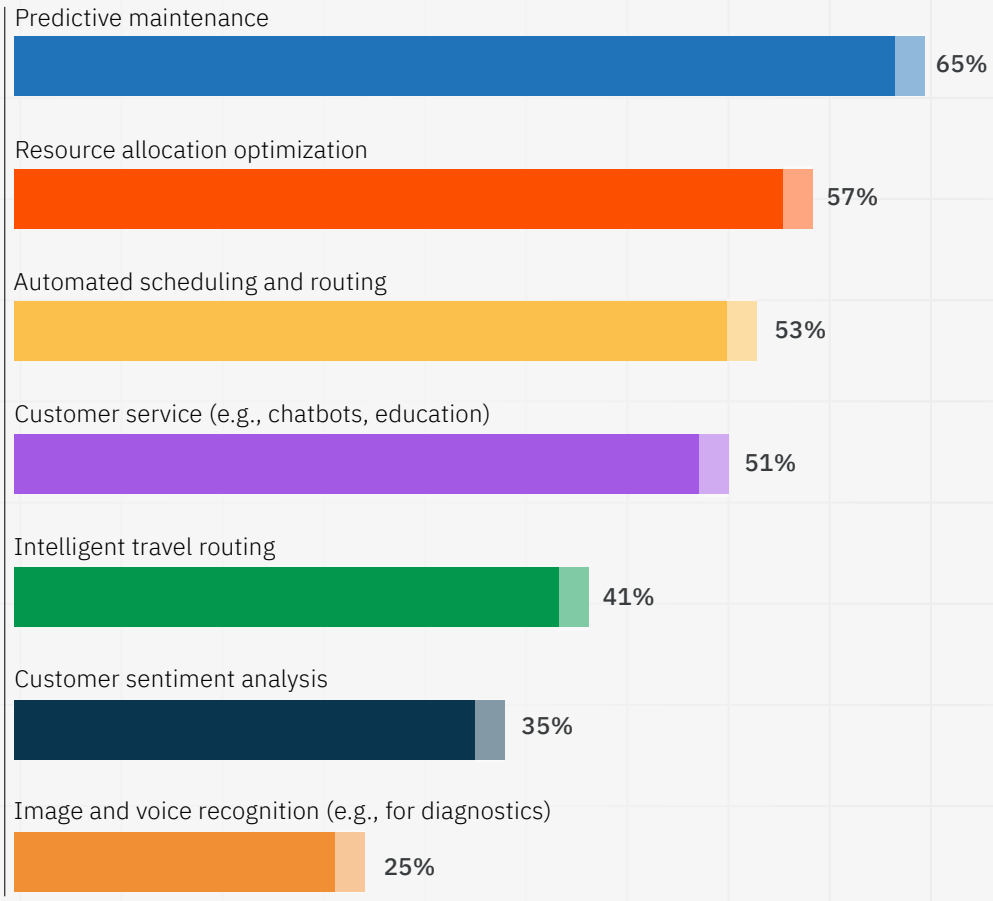
Notably, 23% of the respondents listed artificial intelligence as one of their top two priorities for technology investments. Regardless of its current priority, AI will be a critical investment for most field service operations in the coming years.

Specifically, 75% of the respondents say their investments in AI technologies will increase somewhat over the next two years, while 10% say they will increase substantially.

Nonetheless, there are differences here between respondents who currently use an FSM and those who don't. More than one-fourth of the respondents who don't currently use an FSM (28%) say their investments in AI technologies will increase substantially over the next two years. That's compared to just 6% of respondents who do currently use an FSM.

It's likely that field service teams who are already leveraging an FSM have access to some type of AI technology, which may even be integrated into their solutions. Since they are already enjoying the benefits of AI, they may be less inclined to spend more on the technology in the immediate future.

How do you plan to use AI in your field service operations over the next two years?



Regardless of how they access the technology, field service teams have clear strategies for how they plan to use AI in the future. In each case, most of the respondents will use AI for predictive maintenance (65%), resource allocation optimization (57%), automated scheduling and routing (53%), and customer service (51%).

AI is not seen merely as a futuristic concept in field service management but as a practical tool for solving operational inefficiencies, and it is already paying dividends. The focus on predictive maintenance and resource optimization demonstrates a strategic move towards preventive measures, aiming to minimize downtime and improve service delivery. The emphasis on customer service and scheduling efficiency further highlights the sector's push towards not just operational but also customer satisfaction excellence.

Technology in field service has moved past the operational enhancement stage. These investments will fundamentally change how field service teams deliver maintenance packages to customers. They will even change how teams and customers interact with each other as communication becomes more streamlined and automated.

Conclusion: The Most Exciting Applications of AI in Field Service

AI and FSM technology will be critical components of field service operations in the coming years. Researchers sought to further explore how AI could change field service operations, so they asked respondents to identify what they believe to be the most exciting future application of AI technology in the sector.

The responses illustrate a broad spectrum of applications but converge significantly on a few key areas. Perhaps the most frequently cited area of interest is the potential for AI to enhance scheduling and predictive maintenance. Many organizations are already engaged in this practice by leveraging IoT sensors deployed in the field, combined with standard analytics tools.

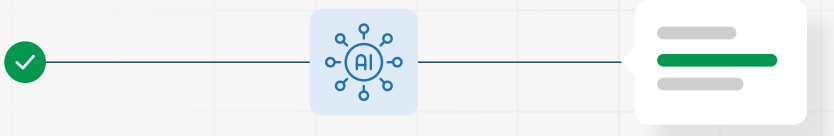
AI promises to streamline analytics and auto-generate prescriptive solutions to future maintenance issues. More importantly, AI could predict equipment failures long before they occur, even identifying risks that would have gone unnoticed through manual intervention and analysis.

Respondents also express a keen interest in AI's ability to optimize scheduling more effectively by incorporating various factors such as resource availability, agent skills, and the complexity of tasks. This reflects a growing recognition of efficiency and customer service as competitive factors in field service.

Finally, the respondents are excited about the potential for AI to improve the customer experience through personalized services and enhanced communication.

The idea of leveraging generative AI to handle common customer queries and requests, thus freeing up field service agents to tackle more complex issues, is one aspect that resonates with respondents. Field service teams understand that AI can play a crucial role in not just optimizing back-end operations but also in transforming front-end customer interactions. Field service teams believe AI applications will even be able to analyze and utilize customer feedback to tailor services more effectively and increase customer satisfaction levels.

Overall, while the applications envisioned for AI in the field service sector are varied, the central theme revolves around enhancing operational efficiency, predictive capabilities, and the customer experience. These results point towards a future where AI is integral to service excellence and business success.



Key Suggestions

- **Prioritize investments in AI technologies, especially for predictive maintenance and resource allocation optimization.** This is crucial as AI's capability in predicting equipment failures and optimizing resources can significantly reduce downtime and operating costs, leading to more efficient operations.
- **Leverage an FSM solution that is easy to implement and delivers value quickly.** With the growing emphasis on customer satisfaction and efficiency, it is important to choose FSM solutions that can be implemented quickly and effectively, without disrupting the business.
- **Identify FSM software that optimizes work order management, compliance, and spare parts and inventory management.** These are the three areas of optimization deemed most important by field service teams when considering a new FSM tool.
- **Regularly review and update technology investment strategies to include advancements in AI and FSM applications.** Staying ahead of technological advancements ensures that your field service operations remain competitive, agile, and capable of delivering superior service and customer satisfaction.

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About the Authors

Zuper empowers fast-growing service businesses to scale, grow, and modernize their field service operations with the industry's most comprehensive, flexible, and configurable field service management solution. Zuper's platform integrates seamlessly with industry-leading apps and CRMs and comes with personalized support, as well as robust reporting and analytics. Thousands of users globally rely on Zuper's automated workflows to enable field workforce collaboration and deliver the best possible experience to their customers. Founded in 2020, Zuper Inc. is headquartered in Seattle with offices in India and the Middle East.

Learn more at **zuper.co.**

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We launched Field Service in 2002 and have been dedicated to supporting the growth of the service industry ever since. What started off as 100 people in a room discussing the future of service has become 500 senior-level service executives being inspired while learning and developing their company as well as their careers.

For more information, please visit **fieldserviceusa.wbresearch.com.**