HOW FIELD SERVICE MANAGEMENT SOLUTIONS CREATE SAFE, SUSTAINABLE OPERATIONS

For field service managers and workers, manual, outdated processes are roadblocks to success. These types of processes are time-consuming and cumbersome, preventing field service companies from readily adapting to supply chain issues, leveraging automation, foreseeing outcomes, and providing the best possible customer experience. A manual, paper-based approach can result in customer churn, costly mistakes, and even injured workers.
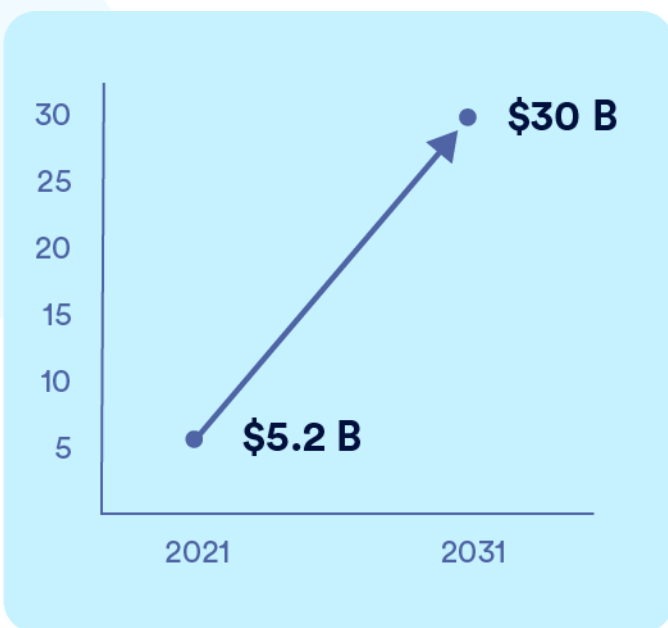
Source: Allied Market Research

It also leaves money on the table. With a compound annual growth rate (CAGR) of 19.2

percent, the field service management market is expected to be worth nearly $30 billion by 2031 — up from $5.2 billion in 2021. Organizations still powered by whiteboards, wet signatures, and manual processes have the opportunity to tap into this exciting growth by digitalizing their operations with field service management solutions.

Digital tools help managers meet customer demands, offer value, protect employees, and boost both productivity and customer satisfaction rates to produce steady growth. They also help ensure drivers and deliveries arrive at their destinations safely and on time; maintain and manage remote spaces and offsite inventory; and make operations more sustainable.

Over the next few chapters, we'll focus on specific ways mobile field service management solutions can empower organizations to minimize delays, cut costs, improve safety and compliance, simplify data collection, and enhance sustainability efforts.

Ensure driver safety and on-time deliveries with mobile solutions and workflow automation

Many customers take time from work to be present for repair jobs and maintenance appointments, so it's important to respect their valuable time. If your drivers can't arrive at their destinations in a safe, timely manner, then unsatisfied customers will look for services elsewhere.

Manual processes can hurt punctuality and productivity. The more technicians have to check in with managers regarding daily routes, specific jobs, or vehicle inspections, the less productive they'll be. They need to be able to quickly and easily access updated company and customer information, so they can get on the road.

76% of logistics executives and experts agree that freight and logistics companies not focusing on building digital capabilities will seriously endanger their business.

Source: Accenture

76%
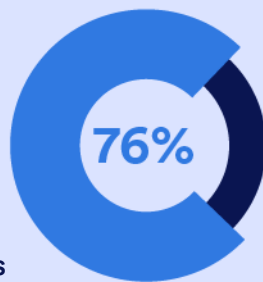
> Manual processes can hurt punctuality and productivity. Enable technicians to quickly and easily access updated company and customer information with digital solutions and automation.

The foundation of effective field service management — whether you work in telecom, logistics, or construction — is driver safety and professional, punctual service.

Fortunately, with the right field service management solutions, you can get technicians where they need to be, when they need to be there, without compromising service quality. Here are a few examples of how you can use mobile field service management solutions to streamline your driver safety and delivery processes.

Log driver hours

To optimize driver safety and delivery quality, field service managers can use online driver log sheets. These customizable templates can include drivers' contact and vehicle registration details, trip mileage statistics, time-off requests, and weekly time sheets to track driver data in one place. With a system that incorporates mobile driver log sheets, both field service technicians and managers can quickly communicate about driver trips, even on the go. Instead of typing out an email, a driver can send a trip update while in the field with a click of a button and a manager will instantly see it in their approval queue.

Manage student and passenger safety

Few driver management tools are as vital as driver evaluation forms. For example, if you supervise city or school bus drivers, your key responsibility is to ensure passenger safety. These forms help you evaluate your drivers' cognitive and physical abilities, allowing you to rate their skills in making turns, operating bus doors, stopping completely at stop signs, parking, and interacting with others to keep commuters and students safe.

Not only can these forms help you train and monitor your bus drivers, but they can also help you maintain safety records over time.

Using a field services management system that automatically collects, organizes, and stores form data (about driver strengths and weaknesses, for instance) enables you to access up-to-date data whenever you conduct quarterly or annual audits.

Document routine fleet inspections

Without a proper fleet vehicle inspection, you risk on-the-job failure, emergency repairs, and liability for vehicle negligence — resulting in lost time and increased costs. While you can complete an inspection manually, it's more practical to use a mobile field service management solution that lets you run, manage, and store inspections from the palm of your hand. Digitalizing your vehicle inspection processes also allows you to quickly search your vehicle database. For example, you can search by plate number, make or model, or inspection date to look up data such as a mileage or insurance renewal dates.

By customizing form fields and adding new ones employees suggest, you can use your fleet inspection form to make sure all vehicle systems are in good working order — from brake lights to door locks. With a variety of question formats, you can include vehicle information, inspection checklists, textboxes for additional notes, pictures, and even a space for inspectors and drivers to sign to

certify an inspection. This capability, possible with e-signature tools like Jotform Sign, provides an official record of the inspection and ensures your forms are legally binding.

Track shipments in transit

Connecting shipment tracking forms with cargo delivery apps helps field service managers track each product or service delivery from beginning to end — including customer name and address, item or service description, and service dates. This digitalization of internal tracking processes enables managers to receive updates from the road regarding shipment schedules, delays, and damage, so they can alert customers and take action if necessary.

Receive reports on necessary vehicle repairs and safety inspections

Even the safest, most well-trained drivers can get into accidents. In addition, if your organization employs dozens or hundreds of drivers, vehicle breakdowns are inevitable. A system that enables workers to send and receive forms on the road empowers workers to immediately fix problems either internally or through third-party contractors.

With vehicle tracking or motor vehicle accident report forms, your drivers can notify you of vehicle or driver issues — including their location and situation. Managers receive

a text, email, or mobile notification of a completed form, so they can quickly provide the proper assistance (e.g., by sending a new driver, new vehicle, or towing service) to minimize delivery delays and prioritize tasks based on delivery distance.

Automate delivery management workflows

Good field service management solutions let you create and store customizable forms for the above use cases. But the best ones automatically route forms and data to the right workers for optimal efficiency. With online forms as the foundation, automated workflows streamline processes, reduce errors, improve collaboration, and, most importantly, alert managers when issues arise. Completely digital approval processes reduce the need for manual, administrative emails and keep workers focused on providing quality service.

Automate driver scheduling

One of the most time-consuming yet necessary tasks for field service managers is scheduling workers — whether based on availability, route optimization, or specialized skills. However, by investing in field service management software that includes automated scheduling capabilities, you can increase productivity, reduce travel times,

— by investing in field service management software that includes automated scheduling capabilities, you can increase productivity, reduce travel times, improve resource use and allocation, and boost employee morale —

Source: Bain

improve resource use and allocation, and boost employee morale — all without reinventing the wheel.

Leverage digital solutions to manage remote spaces and offsite inventory

Field service managers track many moving parts that aren't centralized in one location. First off, workers themselves may be spread out over miles. In addition, field service

companies have hundreds or even thousands of pieces of equipment in their inventory spread across vehicles and warehouses. The better you manage these resources, the more likely your technicians will have what they need to complete a job properly and efficiently.

The best mobile field service management solutions help collect, analyze, and store a variety of data to improve inventory management, remote management, technician support, and customer service. Through online forms and apps, QR codes, and automated reports and workflows, these systems keep field service managers, teams, and data connected.

> Systems that enable online forms and apps, QR codes, and automated reports and workflows, keep field service managers, teams, and data connected wherever they are located.

Here are some specific ways to leverage digital solutions in your field service operations so you can better manage everything from a distance.

Digitize important forms to improve efficiency and accuracy

From online site safety reports and customer feedback surveys to inventory checklists and fleet inspection forms, field management solutions keep your important documents organized and easily accessible in a central, online location, making it easier to manage operations remotely. Plus, thanks to features like conditional logic and autofill, digitization also increases the likelihood workers will complete forms faster and more accurately.

These benefits are simply not possible with physical forms. For instance, with digital forms, a field service technician who has to request new equipment can send a form the moment they see the need. Inventory managers can then approve the request immediately, speeding up purchase times.

Meet industry standards

With the right field service management system, you're better equipped to preserve accurate records and meet safety regulations for the [Department of Transportation (DOT), Occupational Health and Safety Administration (OSHA)](#), and [Hazardous Materials Management (HAZMAT)](#).

These solutions — especially ones with e-signature capabilities — also keep data and communications centralized and transparent, making audits easier. The right software can also help field service managers and workers remain compliant with standards including the following:

- [Health Insurance Portability and Accountability Act (HIPAA)](#)

- [Payment Card Industry Data Security Standard (PCI-DSS)](#)

- [California Consumer Privacy Act (CCPA)](#)

- [General Data Protection Regulation (GDPR)](#)

Improve real-time communications with suppliers and vendors

With material price increases, shortages, and delays, the procurement industry has experienced a lot of disruption in the past few years. As focus shifts from cost savings to more agile supply chain management and better supplier relationships, field service managers are turning to digital systems for support.

Source: [McKinsey](#), [Bain](#)

With material price increases, shortages, and delays, the procurement industry has experienced a lot of [disruption](#) in the past few years. As focus shifts from cost savings to more agile supply chain management [and better supplier relationships](#), field service managers are turning to digital systems for support. When field service managers strengthen their relationships with suppliers, they can create more opportunities with them as well, resulting in innovative solutions to long-standing or even new problems. With better supplier and vendor relationships, field service managers can mitigate the brunt of price increases on customers.

Ultimately, mobile field service management systems enhance communication and

collaboration with third-party vendors to streamline processes, facilitate substitution of materials, and generate value.

Speed inventory and update status

A critical element to any supply chain, a strong inventory management system helps you store, ship, and track products, know when to order and reorder inventory, and improve the customer experience. Automated inventory management processes are less time-consuming and expensive than manual ones. They allow workers to communicate across various warehouses and sites, manage inventory in real-time, and access important information in seconds to improve decision making.

For example, to stay connected across 27,000 acres, the staff of field and maintenance workers at the Three Rivers Park District in Minnesota used Jotform, a digital workplace productivity tool and online app builder. The platform empowered them to build their own app to collect important data, conduct and record daily inspections, generate actionable reports, create workflows, and receive instant push notifications — no matter where workers were located — both online and offline.

Three Rivers Park District also used Jotform Enterprise to automate a time-consuming,

manual computer inventory process in their asset management system for a more streamlined workflow and better visibility of the district's assets. In addition to saving time and money, this type of digitization improves order accuracy, workplace productivity, and customer satisfaction.

Gather information in remote areas

Together, mobile forms (e.g., inspection forms, incident reports, etc.) and mobile apps improve data collection, enable e-signatures, and let you instantly track, view, and store submissions — boosting productivity and collaboration. For instance, adding QR codes to forms — or placing them on physical assets — is a convenient way for employees to find current information about products, such as where they are stored and how many are available. QR codes can also help track packages between carriers at the post office, confirm receipt of vendor goods, and ensure safety check-ins and arrivals at building sites.

That said, field workers don't always have the benefit of instant internet access. A mobile field service management tool like Jotform Enterprise Mobile can collect form responses anytime and anywhere — even offline. Responses save to the mobile device and automatically sync to a server when the connection is restored. You can upload files, accept e-signatures, conduct safety

inspections, share approval requests, and receive instant notifications when data has been submitted — across all remote locations and Wi-Fi dead zones.

Improve demand forecasting

Supply chain disruption has resulted in inflation, shortages, and factory closures over the past few years. But, using field service management solutions with built-in stock control features, some organizations have fared better than others. Combining data recording and inventory features allows companies to cut costs, avoid stockouts, automate reordering, reduce labor needs and inventory expenses, and avoid product waste.

Create more sustainable operations

Both employees and customers prefer organizations that prioritize sustainability. According to IBM's 2022 consumer study,

68% **62%**
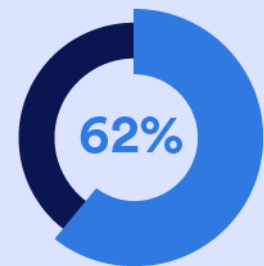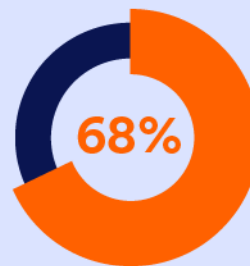
68 percent of people are more likely to seek employment with environmentally responsible organizations, while 62 percent of consumers indicate a willingness to reduce environmental impact by changing buying habits.

Source: IBM

In addition to attracting employees and customers, improving your sustainability practices also enables you to enhance your brand image, take advantage of tax breaks, use fewer resources, and create less waste.

Leveraging a robust mobile field service management system allows you to find a balance of giving customers what they want while working toward your own sustainability goals.

Reduce your carbon footprint

Adopting field service management solutions is one of the most sound decisions you can make to reduce the environmental impact of your operations. Switching from physical documents to online forms, reports, and records does a lot more for the environment than just saving trees. Paper manufacturing also uses a significant amount of chemicals and water and contributes to pollution due to carbon emissions and waste disposal.

Through online drivers logs, route trackers, and other features that make telecommuting simple, mobile field service management

platforms can replace all paper documents, reducing everyday waste and office supply costs.

Maximize fuel efficiency and reduce vehicle repair costs

With elevated fuel costs and record-high inflation, you need to cut costs wherever you can. Field service management solutions provide data-driven insights that can save you time, money, and unnecessary stress at both the pump and repair shop.

Say, for example, your online driver logs show unusually high fuel consumption, even though
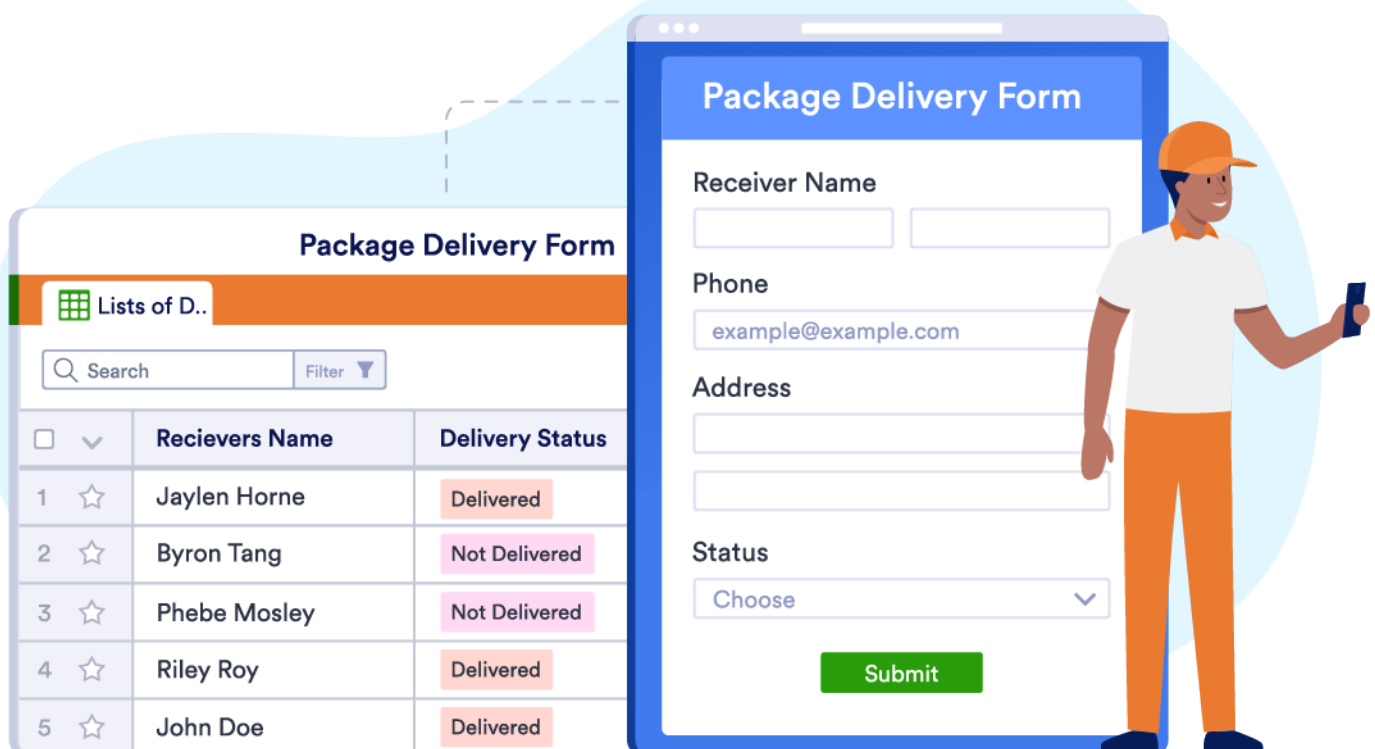
your technicians are driving their normal routes. Comparing your collected data of summer and winter mileage can identify issues you may have overlooked, such as higher [air conditioning](link) use in the summer. You can then account for seasonal activity in your summer budget or add more stops to driver routes so they can make the most of every trip.

Additionally, digital documentation of routine vehicle inspections shows vital information — like how long each truck can run before needing a tune-up and how often each truck breaks down. Many mobile field service management solutions track, store, and analyze this type of data, helping you minimize major repair costs and optimize the lifetime value of each vehicle.

Develop more sustainable supply chains

Many field service management systems include [form analytics](link) features, which can help you compare your suppliers, evaluate their sustainability efforts, identify opportunity areas, and, ultimately, choose ones that align with your goals. You can use these mobile field service management solutions to consolidate shipments from several suppliers to multiple locations, for example, or gain visibility into exactly how vendors are extracting or producing raw

materials. With full data visibility, even minor data points can help you more efficiently use assets, better predict demand, optimize shipping routes, and plan around the effects of climate change, wildfires, and other environmental factors.

Supply chain sustainability efforts also improve your company's reputation. Global brands like [Starbucks, Nike, Apple, and Microsoft](link) are all doing their part to commit to a more sustainable future and demonstrate the importance of environmental responsibility, elevating their brand value. Nike, for example, has embedded a culture of sustainability not only into its design process but also distribution and sales. The company even published a [manufacturing map](link) to transparently show where their products are manufactured around the world.

Optimize your decision making and strategic planning

$12.9 M Annual Cost

It's not practical to have data siloed in various tech solutions that don't connect to each other — or, worse, spread out in handwritten or printed spreadsheets. Besides costing businesses $12.9 million annually, poor data quality leads to faulty decision making.

Source: [Gartner](link)

A robust field service management system securely collects, manages, stores, and analyzes all your real-time data in one location. The results are data sets that are comprehensible, accessible, machine-readable, and easy to audit. In fact, the more data you collect, the more complete your picture of your company's strengths and weaknesses. Overall, data enhances your decision making as it allows you to establish better baselines, spend less time reconciling data, better predict outcomes, inform supply chain practices, and cut costs.

Improve the efficiency of your data centers

Data centers are the reason comprehensive, powerful field service management platforms work offline and online, onsite and offsite, and across operations of all sizes.

Data center facilities with various types of IT equipment and computer systems consume more than 100 times the amount of energy that similarly sized office spaces do. This high electricity usage is not only energy-intensive but expensive as well. You can implement best practices to save energy, such as increasing HVAC supply air temperatures to help servers stay online longer and improve the lifespan of your hardware. You can also recycle or donate electronic products.

The best way to sustainably keep data secure is to use a cloud-based field management solution that stores information on a dedicated server. When you're not worried about maintaining data-hosting, you can focus on improving the way you work.
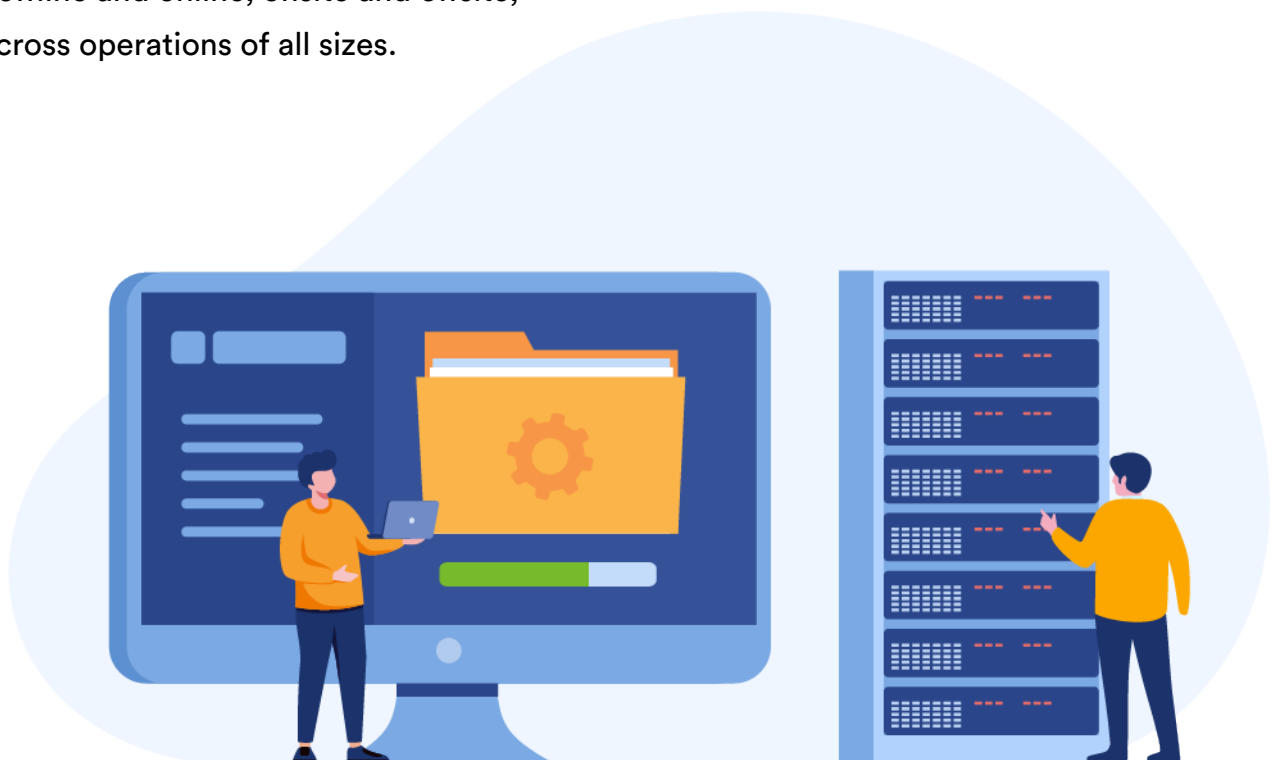
Mobile field service management solutions enable safer, more sustainable operations

5 considerations when mapping out a data-driven, digital transformation

1. People
2. Data
3. Insights
4. Action
5. Results

Source: HBR

When it comes to upgrading your field service management operations, smart, no-code field service management solutions ensure driver safety and delivery success, manage workshops and inventory remotely, and make operations more sustainable. These tools immediately increase operational mobility and flexibility as they are easy for employees to use, whether they have programming skills or not. You don't have to spend time upskilling your team or relying heavily on IT professionals to spend months adapting the solution to your workflows.

By embracing digital transformation, field service companies can effectively collect and

manage data in the field and improve productivity and profitability to grow and scale their operations. Ultimately, digitizing every area of your field service management operations saves money, reduces errors, minimizes resource costs, and improves communication — no matter where your technicians are deployed for the day.

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