# Field service automation in the era of 5G

why is it so critical for businesses?



The field service industry is being disrupted by the advent of automation, more so with the arrival of 5G that promises faster connectivity speeds, ultra-low latency and greater bandwidth. 5G has the potential to transform industries and dramatically enhance day-to-day experiences. How is your business going to take advantage of this opportunity?

The promise of 5G coupled with new technologies such as secure & scalable cloud, mobile phone with sensors & apps, platforms with APIs for integration, and machine learning is positioning the field service industry at the cusp of a massive transformation that will change the way the industry does business. Today, businesses will need to make the most important decision they have ever made - adopt automation or stay with the status quo. Let's look at how the lessons of history can guide us in making the right decision.

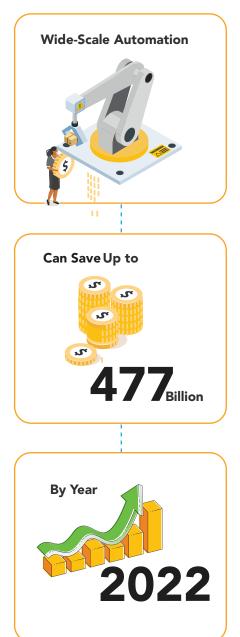
In the 1970s, Japanese automakers started to use industrial robots in automobile manufacturing. This was one of the key drivers that enabled Japan to become the largest automotive manufacturer in the world. It enabled Japanese manufacturers to quickly launch new factories to enable rapid overseas expansion. You can see how adopting automation helped Japan become world leaders in auto manufacturing.

## So what is automation?

We can think of automation as the technology by which a process or procedure is performed with minimal human assistance. At its core, automation is about implementing a system to simplify a workflow or process by replacing manual, replicated and repetitive tasks with technology. Automation has shown that it will lower costs, reduce the risk of human errors and improve efficiency and productivity.

With the advent of 5G, businesses have a golden opportunity to take advantage of the faster speeds and connectivity, making it a strategic imperative for businesses to automate their field operations.

According to a Capgemini Research Institute study, businesses could achieve up to \$477 billion in cost savings by 2022 through wide-scale adoption of automation in sectors like automotive, retail, utilities, facilities, manufacturing and trade.





Historically, when automation sweeps through an industry, the status quo is challenged. The rewards are enormous but it does come with a degree of pain and disruption. Companies that act on this change will survive and thrive while those who do not adapt are at risk of going out of business. Over time, we have seen this scenario play out across many industries.

Similarly, the field service industry is at a crossroads. Field service operations are highly complex with thousands of employees in the field, needing job instructions and schedules to do their jobs. Data that these employees gather in the field has to be captured in such a way that it can be passed on to various back-office systems for further processing - for Payroll, Compliance, Audit, and KPI based analytics to help optimize operations. Many field service companies are grappling with this challenge. While some have already adopted a fully integrated stack from scheduling systems to field operations to finance, the integration with these disparate systems remain a big gap that needs to be on the radar of operations management teams.

From a financial point of view, field service automation is now affordable, especially now with 5G promising to deliver a huge productivity boost. The advent of cloud, mobile & data based SaaS technology has made it possible for small and large companies to adopt field service automation quickly and at a lower cost, making it easier for businesses to justify the adoption of automation.

As an example of a remarkable ROI boost, let's look at one of our customers, a facilities management company that has over 750 field employees. By using allGeo's platform to automatically check-in and check-out of field jobs using geofence technology, each employee is able to contribute an additional 40 minutes per day due to improved field operations efficiency.

This productivity gain is equivalent to adding 63 more employees to the team! And this massive dividend is a result of automating just one part of their complex workflow. This is indeed the power of field service automation.





Let's look at how field service automation gives you complete visibility into your field operations Drilling down into specifics, field service automation will help businesses:

Schedule daily tasks and work orders including job sites

Visualize employees' location, job sites and time spent on each job

Automatically optimize routes, calculate miles and attendance hours

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ຂ່⊙ຍ Dispatch reminders, messages, and alerts to field employees

Capture jobs related data in the field e.g. mobile forms, pictures, QR/barcode

Monitor custom workflow with exception alerts e.g. safety checks, late arrivals

Generate custom analytics & reports on service delivery performance and optimization

Integrate data with CRM, ERP, and financial systems using modern web API

Getting this kind of extreme visibility into field operations makes a big difference to the field service workflow. But in order to achieve true end-to-end automation of the field service workflow, the role of integration is going to be significant. Integration helps connect field operations with scheduling and CRM tools on the front-end and Payroll, ERP and CRM systems on the back-end

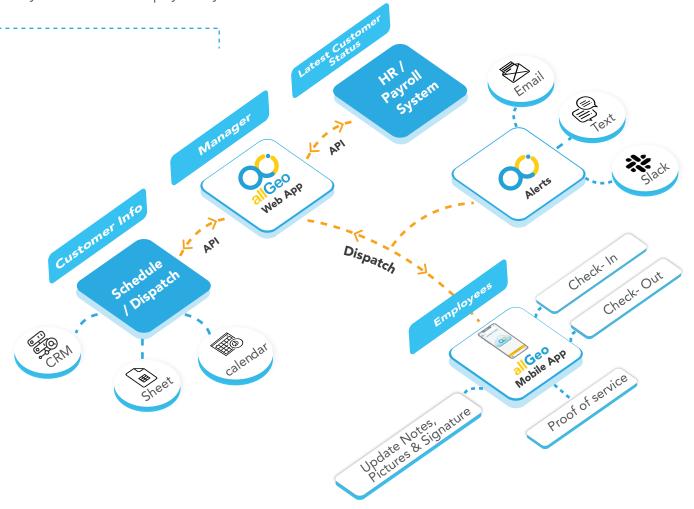


### The impact of Integration on Automation

Imagine a scenario where customer information resides in a CRM system. Field schedules may be in the CRM or in some other scheduling tool like Google Sheets or Google calendar. All the scheduling information is automatically imported into your field operations app and made available to all field employees. Scheduling information can also be sent via email, Slack or text. Employees are automatically checked in and out of jobs and record notes, pictures and other information on their mobile apps.

The field data is sent automatically to a back-end HR payroll system where all the job hours are computed. Similarly, service information can be sync-ed back into the CRM so each customer account is up to date with the latest notes and service SLA status. Repeat visits or the next scheduled visit is also imported automatically into the scheduling system.

Another common integration scenario is operations to payroll integration. Payroll teams have a strong need to get time tracking data integrated with their payroll system. They need to automate a "time tracking to payroll" workflow where time tracking data is directly sync-ed with their payroll system.



More complex payroll integration involved pay rates and job codes which is complex even for payroll teams. That's because most time tracking tools are unable to handle job codes and pay rates. Time tracking systems also need to measure exact time spent on various jobs during the day including in-out from job sites, use of equipment and specific tasks status. And all this field data needs to be transferred seamlessly into payroll platforms (Quickbooks, ADP) using pre-built connectors or custom reports for data import.



## Case study of Property Management company using allGeo for automation

This Residential Commercial Property Management struggled with an unwieldy solution consisting of multiple vendors to record time-attendance & mileage data in the field and then route the data through a middleware company to be finally submitted to their payroll platform.

#### New workflow with allGeo:

allGeo was able to simplify the entire field service workflow for the customer by switching to its one-app solution. With this solution, the customer's employees were able to automatically record time & mileage while the back office team was able to set up a zero-touch process to export the logs to their payroll system at the end of the daily shifts. No manual process or human interaction was required once onboarded. They were able to use many capabilities offered by allGeo and its integration with ADP Workforce Now<sup>R</sup> to streamline their process:



- Managers see their employees' location on a real-time map view and will get live alerts for various statuses such as employees arriving or leaving a job site
- The time an employee spends at a job site is automatically captured as long as employees are using the allGeo mobile app on their phones
- Automatic mileage tracking without any employee input
- The relevant data for paycode reporting would be processed against associated pay codes

Reports auto-synced with ADP Workforce Now via API

## Conclusion

Field service automation is here to stay. With the advent of 5G, businesses are already thinking of ways to benefit from automation's promise and give themselves an edge in the highly competitive markets they are in. While adopting automation can be disruptive, the good news is that it does not have to be done all at once. Automation can be deployed in a step by step fashion by applying it first to one key component in the workflow. We believe this is truly the time for field service businesses to take action. The businesses that act will reap the rewards of automation and lead others into the future. What action are you going to take in this new 5G era?





## About allGeo

allGeo is a leading provider of field service management for mid-size & enterprise businesses to achieve excellence in field service operations by providing tools to improve operations & payroll processes. The allGeo platform helps businesses create custom field service workflows using products & tools such as Scheduling, Time Clock, Tracking & Monitoring, Mileage, Dispatch Messaging, Mobile Forms, Events based alerts, and Reporting.

Examples of workflows include - Time tracking using geofence and pay rate logic for Payroll, QR and Geofence sites for jobs tracking, Lone worker safety with E911 integration, Electronic Visit Verification (EVV) for home health care, and Field Inspection using QR / mobile forms. The allGeo platform integrates with your CRM, ERP and payroll systems to enable easy flow of data from the field to your back office systems.

Schedule Consultation

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