Field Service empowers companies to improve customer satisfaction, first time fix rates and resource productivity.

Microsoft delivers advanced scheduling, resource optimisation and mobile enablement capabilities that set organisations apart by keeping the customer at the centre of the business. Field service, including advanced analytics, machine learning and the Internet of Things’ capabilities, allows organisations to move from a costly break-fix model to a never-fail service model.

“When we chose Dynamics CRM Online, the winning factor was the Field Service and workforce management capabilities.”

**Alvise Vigilante**  
CEO, YOUGENIO

### Key Benefits

**Customer First**
Keep the customer informed during every interaction of the service chain to increase brand loyalty and advocacy.

**Connected Interactions**
Provide employees and technicians with 360° information, from any location to improve resource productivity and customer satisfaction.

**Empower Organisations**
Improve profitability by optimising schedules and use remote troubleshooting so a technician is dispatched only when necessary.

### Overview

We provide complete flexibility in how organisations choose to schedule their resources by offering manual, assisted and automated, optimised scheduling. In each of these workflows, we support schedulers with visual cues to simplify their work.

We leverage inventory management capabilities that capture real-time information from deliveries and technicians to ensure that the right parts are always ready to go. On their way to and at the customer location, technicians use a mobile app to stay connected. Each technician updates their status using standardised options such as driving, in-progress work and completed work. The mobile app also provides step-by-step instructions for the task at hand. The technician can snap photos of the completed work, get customer sign-off and even collect payment.
Key Capabilities

Schedule and Dispatch Optimisation

Field Service provides the ability to manage people and equipment with flexible scheduling options that accommodate both customer service representative and dispatcher workflows—including precise appointment scheduling—and ensure the right resource with the right experience is scheduled for the job.

- Identifies and organises available resources by several categories to intelligently balance workloads and resources.
- Matches skill sets of the technician against the requirements of the work order.
- Understands geography, availability, truck inventory, regulatory requirements, customer preferences and service level agreement.

A drag-and-drop schedule board allows dispatchers to assign resources and set up schedules for multiple work orders using a map or list view. Real-time visualisation and status indicators enable rapid and efficient reallocation in response to changes or emergency situations.

- Enables shorter SLAs and better SLA performance
- Scales to any size organisation
- Is configurable by end-users
- Supports multiple scheduling policies
- Manages employees, teams, contractors and assets

Resource Scheduling Optimisation

Resource scheduling optimisation can schedule and dispatch resources without the aid of a dispatcher while still maintaining the flexibility necessary to respond appropriately and nimbly to changing requirements, new work orders with narrow Service Level Agreement (SLA) windows or other circumstances.

- Fit in more appointments per day
- Prioritise highest value customers
- Minimise driving time
- Send a customer’s preferred technician
End-to-End Customer Centric Experience

Customer satisfaction is a key driver for field service organisations. Field Service puts customers at the centre of all interactions by keeping them informed, making communication easy and ensuring they have positive interactions at every step within the service chain.

**Highlights**

- Customers can see upcoming service appointments and view completed and open cases through a portal.
- Integration with Glympse keeps customers informed of the technician’s arrival time in real time, and provides the technician’s photo and vehicle information.
- Customers automatically receive text messages and phone calls to keep them informed at every stage of service.

**Service Agreements**

Field Service helps organisations improve customer satisfaction, with reliable service through predictable service delivery and inventory management that features flexible service schedules that can be recurring if needed. It also maintains the accuracy of service contracts, warranties and installed products across customers, geographies and locations. When contract data is accurate and available, SLAs are met, customers are satisfied and all service revenue is accounted for. Enhanced visibility into accurate contract information not only drives faster, more accurate billing, it enables field service teams to identify new sales opportunities to drive additional revenue.

**Contract and SLA management**

- Manage terms and conditions
- Apply different billing rates for various types of work and materials
- Automate escalations

**Assets and warranty management**

- Classify assets with barcodes or serial numbers
- Track asset location, maintenance needs and repair history
- Track warranties against assets
- Provide field staff with visibility into terms and expiration dates
- Ensure that service and billing conform to warranty stipulations
Inventory Management

Inventory management lets you manage the updates, and stock history for any type of location—warehouses, depots or trucks. Real-time updates ensure that your inventory is accurate, while replenishment and purchasing can be done within the system or through the integration of Microsoft Dynamics 365 for Operations. Truck stock is managed as part of the scheduling process, ensuring technicians have the right parts for every call.

Highlights

- Improve first-time fix rates with accurate allocation of parts.
- Provide mobile access to inventory and parts information and management resources.
- Manage inventory information for any part transaction: return material authorisations (RMAs), stock adjustment or stock transfer.
- Track service stock accurately at mobile and fixed locations to reduce write-offs.
- Adjust inventory records automatically based on field use or en route purchasing.
- Effectively forecast materials’ requirements.
- Take advantage of bulk and just-in-time ordering.

Mobile

No matter what device is used, organisations can leverage native mobile applications to provide real-time and offline data and gain visibility into customer information to improve field processes and increase technician productivity.

Mobile workers are provided with a multi-day calendar of work order details that can be dynamically changed. Work orders are linked to customer and case history, installed product configurations, parts information, pricing and more.
Remote administration with no-code customisation

As business changes, new customisations can be created quickly and easily with no coding—and instantly appear updated on all mobile platforms. Organisations can centrally manage all users and devices (regardless of platform) and perform remote data wipe for lost or stolen devices.

Highlights

- Automate service report creation and ensure consistency.
- Easily capture all information for fully updated work orders.
- Maintain consistency of work performed with step-by-step checklists.
- Complete or launch customer satisfaction surveys.
- Show technician’s routes and upcoming appointment types on map.
- Route technicians on the best route with turn-by-turn directions.
- Take photographs of various stages of work order completion.
- Access all relevant information regarding case, customer information, equipment, past issues and recommended steps for repair.
- Capture client signatures, generate invoices and collect payment.
Connecting Field Service

Connected Field Service enables a field service organisation to detect, troubleshoot and resolve issues remotely so a technician is dispatched only when necessary.

In a traditional field service organisation, the customer has a problem and calls to get it fixed. A technician is dispatched with the customer’s history and record of the concern call only. Connected Field Service eliminates the customer concern by attempting to complete self-healing repairs remotely before sending out a technician.

Because Connected Field Service connects devices in the field and harnesses the power of the Azure IoT Suite, organisations can know about problems and solve them at minimal cost before their customer even becomes aware of the issues. Proactive problem solving and remote troubleshooting helps to improve customer satisfaction and resource productivity.

Simple design

Field Service combines the power of Field Service with Internet of Things connected devices. This means that devices report anomalies that can then be resolved before customers know there is a problem.

Connected Field Service provides a simple to configure experience so either newly installed or existing customer assets can be connected from within Field Service. Behind the scenes, it leverages a preconfigured Azure IoT Remote Monitoring solution, Azure Logic Apps and API Connector.
Incremental path to implementation

- **Basic:**
  When an anomaly is detected, Field Service automatically creates a work order and dispatches a technician to look into the issue. This level of Connected Field Service takes a proactive approach to improving customer satisfaction by decreasing overall downtime and making repairs before customers become aware of the problem.

- **Advanced:**
  When an anomaly is detected, Field Service asks the device to try to fix itself with a single, self-healing command. If that command doesn’t work, then Field Service automatically creates a work order and schedules a technician. Organisations experience improved customer satisfaction levels and gain greater productivity because fewer technicians are dispatched when devices can self-heal.

- **Expert:**
  At this level, Field Service initiates a multi-step workflow when an anomaly is detected. This attempts to fix the device in as many ways as possible without requiring human intervention. This level maximises customer satisfaction and resource productivity because a technician is only dispatched when all other possibilities are exhausted.

**Connected Field Service for Preventative Maintenance**

Preventative maintenance is another important use case that fits into the proactive approach of Connected Field Service. Organisations can benefit from “just-in-time” preventative maintenance rather than scheduled preventative maintenance, because Connected Field Service can look at the actual consumption of a part and send out alerts when the part needs to be changed or cleaned.

Air filter replacement is one example. Typically, preventative maintenance on air filters is on a time-based schedule, such as every six months. With Connected Field Service, the actual life of the air filter can be understood based on consumption. Filters in dustier places can be replaced on an “as needed” basis rather than according to a calendar schedule.

Because Connected Field Service ingests millions of messages from millions of devices, machine learning capabilities allow Field Service to predict when a device needs attention and automate self-healing or maintenance steps before any kind of problem even registers through Azure IoT.

**Highlights**

- Decrease the number of repair appointments by sending fewer technicians onsite.
- Identify and fix problems before customers are aware with sensors sending alerts.
- Solve issues before failure with automatically initiated, multi-layered troubleshooting.
- Identify underperforming products by looking at aggregate device data.
- Perform “just-in-time” preventative maintenance by understanding actual consumption.
Business Intelligence

Operational business intelligence enables field agents to deliver the best possible customer experience with real-time visibility into KPIs and the ability to drill-down into the details. Leveraging insights gained from the multiple facets of field service (agent performance, routing and scheduling, equipment failures and parts inventories) and including sales, marketing and supply chain data, organisations can use these analytics to provide valuable real time, predictive and proactive information that can help drive continuous service quality improvements and revenue optimisation.

Highlights

- **Performance Management**: track performance with interactive graphical scorecards and dashboards.
- **Self Service Reporting**: out of the box reports and business user-friendly tools for easy custom reporting.
- **Drill-Down Analysis**: see detailed transaction level data to assess specific issues.
- **Predictive Analysis**: sophisticated predictive analysis, segmentation and recommendation algorithms.
- **Visualisation**: stunning graphic representations of real-time business insights that can be modified and expanded upon.

For more information, please visit: [https://www.microsoft.com/en-gb/dynamics/field-service](https://www.microsoft.com/en-gb/dynamics/field-service)