Integrated business planning in service organizations becomes even more crucial in terms of increased competition and more demanding customers. To achieve optimal results in service management, all employees involved in the service delivery process should be equipped with the functional tools enabling them to collaborate effectively. With enhanced communication, automated routine tasks, and limited ad-hoc service orders, workers are able to focus on more complex issues, improving business performance and service quality. To facilitate this, Comarch provides end to end field service management software designed to support field service activities at each step. With Comarch Field Service Management (FSM) features, staffing, managing and enabling field tasks are simplified. As a result, the entire company benefits from effective planning and scheduling, maximized performance and improved customer satisfaction.
EFFECTIVE PLANNING AND SCHEDULING

With numerous service requirements and many clients in different regions, field work management may be quite challenging, especially when your company encounters unexpected events such as work order volatility, cancelled appointments, employee unavailability or insufficient internal resources. In these situations, assigning tasks to appropriately qualified technicians becomes extremely difficult, and it requires much more effort to deliver outstanding customer service. With field service scheduling software, these challenges may be simplified thanks to process automation and optimization.

AUTOMATED DISPATCHING

Field service scheduling options enable you to fully optimize your mobile workers’ calendars in real time. Task assignment is simplified with the automated dispatching option, based on each technician’s skillset, workers’ availability, and their current location. With field service scheduling software, incoming requests are assigned to qualified technicians near the customer location. With data collection in the Geographic Information System (GIS), field workers’ routes to clients’ destinations are optimized, so driving time and costs are minimized.

TIME MANAGEMENT

With an easy to read calendar you have access to field service workers’ schedules and work order details in one place. You see their daily, weekly or monthly schedule and all the assigned tasks. Technicians’ work time is registered, and details about task execution updated in real time. If any changes are necessary, you can re-plan the tasks with the drag and drop option in field service scheduling software and change the assigned technician.

MOBILE FIELD SERVICE TRACKING

Task execution by field service staff should adhere to the plans. Real-time tracking helps you control each task’s status and react when needed. With FSM software and GPS integration you are tracking where your remote workers are, when they are available, and what problems arise. When cancellations or delays occur, you can use the easy rescheduling option to manage the changes and maintain a high level of service quality.
CORRECTIVE, PREVENTIVE AND PREDICTIVE MAINTENANCE

Equipment maintenance planning in field service companies normally takes hours. You need to know what the parts are, and when and where they should be serviced. Even if tasks for technicians are scheduled, unplanned or emergency repairs may be required, and the plan will need immediate changes. All failures and changes result in unnecessary costs for you and your client. To manage maintenance challenges, you need data-driven field service software that helps you automate your work and optimize schedules, and which informs you about possible future failures. As a result, you will reduce repair-related costs, show your clients that you meet equipment maintenance agreements, and ensure their business continuity without unnecessary downtime.

CORRECTIVE MAINTENANCE

Some appliances can continue their work even after a breakdown, e.g. thanks to the redundancy of their components. Even if one part is broken, the whole module can continue working using other operating parts, but offering limited efficiency. With a field service maintenance module, you can gather all monitoring data and compare them together or with desired values. All deviations can be automatically detected and reported as new maintenance tasks, thus saving time and money by preventing failure in more expensive hardware protected by the damaged equipment.

PREVENTIVE MAINTENANCE

To avoid unexpected breakdowns and associated downtime and costs in field service companies, equipment requires replacement parts and periodical inspections. Each machine or part provided by the manufacturer has a recommended date and time for such activity. With such data and a preventive maintenance module, you can easily plan service appointments automatically and avoid more expensive repairs. By assigning the tasks at the right time and preventing the equipment from breaking down, you can also extend the life of assets, and in consequence increase overall efficiency and ensure uninterrupted productivity. As a result, you benefit from reduced maintenance costs and save time spent on planning schedules for technicians.

PREDICTIVE MAINTENANCE

IoT solutions together with Comarch FSM enable even more proactive issue resolution by field service staff. With sensors on machine parts, you can monitor, for example, data about temperature, weather, dust, or humidity levels, to predict and eliminate the risk of equipment malfunction. As the data are processed in real time, you can receive notification on mobile devices about a problem and react immediately. As a result, business operations may continue uninterrupted, the cost of repairs can be minimized, and new equipment purchases can become unnecessary.
MOBILE WORKFORCE MANAGEMENT

Managing a mobile workforce requires the smooth flow of information between dispatchers and technicians in the field. Field staff need to have access to the right information at the right time to manage tasks and satisfy customers. If a service visit is to be efficient, the field service professional needs important details about the task and the customer. The dispatcher is responsible for providing the information and controlling the service delivery process. To ensure high quality customer experience in the long term, there is also a need to keep repair history and documentation, enabling the resolution of future issues.

WORKFORCE MANAGEMENT MOBILE APP

Comarch Field Service Management mobile app enables technicians to access work order data, no matter where they are. The app, available on Android and iOS, fully supports communication between members of the field service team. With offline synchronization capabilities, Comarch FSM mobile app facilitates gathering mobile signatures, adding technicians' comments about tasks, and creating completion reports that may be sent to the customer automatically.

TECHNICIAN AND DISPATCHER COOPERATION

Efficient mobile workforce management is possible only when technicians and back office employees communicate effectively. Comarch FSM mobile app allows the immediate exchange of information, including work order details, customer repair history, and changes in the schedule. Within minutes, technicians know what should be fixed, where to go and what piece of equipment will be needed on site. Even if technicians need to handle more complex issues, Comarch FSM app lets them exchange information with the dispatcher, using the chat feature and photographs sent in real time.

PRODUCTIVE WORKFORCE MANAGEMENT

Together with great collaboration comes an increased number of tasks completed per day. The well-informed technician is able to manage tasks more efficiently. Field service professionals have access to task details and data about the previous visits. As a result, each repair is diagnosed faster and may be carried out more efficiently. Technicians are able to fix equipment during the first visit. This leads to reduced total service costs, and the ability to assign more tasks to field service employees. All these field service app features facilitate your field service management and lead to higher satisfaction of your clients.
DATA INTEGRATION, REPORTING AND FORECASTING

Delivering outstanding service to clients requires constant analysis of the processes. That is why appropriate data collection and utilization is so crucial. With information gathered in the database, field service organizations are able to discover business insights and make more informed decisions about further improvements. Once the internal systems are appropriately integrated with the field service management tool, the company can use the full potential of the data. Through data collection and analysis, service companies may optimize schedules, manage inventories, improve overall operational performance and be more forward looking.

DATA INTEGRATION

By integrating Comarch FSM software with internal data sources, field service companies can provide a high level of customer service at each step of the process. Integrations with trouble ticketing, call center, CRM and ERP, fleet management, ECM systems, IoT devices, and inventory mean Comarch FSM users benefit from end to end service process automation and optimization. As a result, all team members, including managers, dispatchers, call center and field service staff, can deliver top-class service to your clients, while the management team can control and improve it.

DATA ANALYTICS AND REPORTING

In Comarch’s solution, data collected from different sources including CRM or ERP are transformed into easy to read dashboards. You can present data with pre-defined templates for reports to track common KPIs, or use the report designer to personalize views. With dashboards, managers are provided with information about operational and strategic performance. Updated information about closed, open or overdue tasks, or escalations, enable better field service management on a daily basis, while internal and external staff productivity KPIs allow future resource planning.

FORECASTING

Service businesses should make data more actionable by using the prediction features. With the forecasting module in Comarch FSM, based on historical data and specific knowledge, you can predict resource demand in the context of skills and working area, and then make smarter decisions about skill changes and resource reallocation. The forecasts also allow you to react faster to trends and plan resources and training in the long term. As a result, your business becomes more proactive than reactive, and is better prepared for the future.
CUSTOMER SERVICE

Customers are becoming more and more demanding of field service companies. They expect short response times for their requests, and the delivery of professional service on site. This necessitates informing them about the date and time of service appointments and updating them about where the technician is, when they are expected to arrive and how long the service visit will take. Then, during the visit, field service workers should perform the tasks correctly and efficiently to ensure top customer service and client satisfaction. But, in order to exceed customer expectations and deliver outstanding customer experience, there is also a need to provide after-service support that will enable you to maintain your positive relationship with the client.

SELF-SERVICE

With the client portal module, you allow customers to be involved in the service process from the start. Thanks to easy communication via the portal and the use of notifications, they can choose an appropriate date and time for their appointments, and cancel or reschedule visits. Thanks to this self-service option, clients can control the situation, and view technician location and tasks status. With these software features you may adjust your services to meet customers’ changing needs.

SERVICE QUALITY

To ensure field service of high quality, Comarch FSM provides several options enabling efficient issue resolution and service process tracking. With task checklists, technicians are able to perform effectively and within the expected timeframe. When a work order is complete, the technician adds photo documentation and notes, and the customer rates the technician’s work before filling out the quality survey on the mobile device and confirming service delivery with a signature. With all these solutions, you know how your customer service is performing.

AFTER-SERVICE SUPPORT

Even when a service has been delivered, a client may require further documents about the performed tasks, or might need to make new appointments. In these cases, your business should use information about the previous service appointments to help the client take further steps. To facilitate this, Comarch FSM allows your clients to define preferred technicians, view visit histories, and see documents regarding the resolved issues. With these options, the customer service process is constantly being improved from beginning to end.
FIELD SERVICE EMPOWERMENT

Efficient task handling by field service workers depends on adequate task assignment and each technician’s motivation to manage their work. When properly qualified and motivated technicians receive appropriate information and have the parts they need to manage a task, the service may be performed during the first visit. But even in this perfect situation, a technician may experience problems, especially when the task turns out to be more complex than expected. Then, the service visit takes longer, and there is a need to consult other field service professionals. In this situation, effective communication and collaboration between members of the team is essential. To perform better and deliver top customer service, technicians also need additional incentives such as gamification. To facilitate this, you should empower field service workers with functional, innovative software.

PLANNED WORK FOR FIELD SERVICE

With Comarch FSM software, each technician’s work is planned automatically, based on skill set and location. Each field service worker receives a notification on smartphone or tablet, along with all required information about a work order, particular tasks and customer location. By empowering field service operatives to access the service history, they can also diagnose the problem without unnecessary calls to colleagues. Technicians can be advised on the route they should take in order to arrive at a client’s premises on time, which is especially appreciated by customers during an urgent situation.

COMMUNICATION AND COLLABORATION

In some situations, technicians need to work together to resolve more demanding tasks. Comarch FSM solution for field service workers enables effective communication between team members, thanks to the internal chat feature, photo attachments, and real-time notifications. Task steps can be explained in detail to less experienced technicians, allowing them to complete the work order. And, when there is need for a particular equipment on site, they are able to transfer it from another technician with one click on their mobile device.

CLIENT SERVICE

The service visit ends with client confirmation and work assessment. With the Comarch FSM mobile app this is simplified and paperless. Field service workers add service documentation, create completion reports, and ask the client for their digital signature. In order to facilitate better client service analysis, customers are also asked to fill in survey reports and assess the quality of tasks. With these features you empower your technicians not only to manage the tasks but also to improve client experience.
GAMIFICATION

When field service workers are motivated to manage their assigned tasks, your company is able to ensure outstanding service for clients. This is why Comarch FSM offers an additional gamification module allowing you to reward technicians for delivering superior service. The gamification feature can increase your employees’ motivation, assigning them points that can later be exchanged or granted to other technicians to reward them for help. On a dedicated site, they can compare their achievements (such as average customer satisfaction) with those of their colleagues. With this feature, every member of your field staff is engaged in work order execution, your clients benefit, and you ensure high customer satisfaction.

THIRD-PARTY WORKFORCE MANAGEMENT

Outsourcing services to third-party providers allows organizations to reduce costs and extend their service capabilities. With outsourced resources, the service business may not only serve customers cost-effectively, but will also be more flexible and prepared for changing demand for services. However, to ensure outstanding service for clients, external service workers should be managed effectively, and the tasks they perform should be monitored and controlled.

EXTERNAL FIELD SERVICE MANAGEMENT

Comarch’s workforce management software allows simple cooperation with third-party service providers. A dedicated module, with features such as adding sub-contractors, organization structures, resources, service regions and work types enables effective external workforce management. Using this tool lets sub-contractors improve the performance of their workforce. Tasks are assigned automatically, based on configured rules. When your service partners operate in the same region, you can also define priorities to avoid unnecessary communication problems.

MONITORING POSSIBILITIES

Extending service capabilities calls for more attention to monitoring external field staff’s task performance. However, with many sub-contractors in different regions, controlling task execution is far more complicated. To simplify this process, Comarch Field Service Management provides full visibility of the outsourced workers’ performance. With set KPIs, you control SLA compliance and measure external technicians’ performance. With these features, you have access to real-time information about how external providers perform.
QUALITY CONTROL

To maintain the high quality of service delivery you need client feedback, especially when you decide to use outsourced resources. With easily configurable audit forms in Comarch FSM, clients answer survey questions on a mobile app and you are updated about the quality of the performed tasks. With this feature, you have control over external field service employees, and you can deliver top service using the sub-contractors’ resources.

SITE ACCESS MANAGEMENT

As service companies grow, their need to handle more tasks, greatly extended facilities, crucial infrastructure elements and protection of sensitive data increase. Scaling the organization entails a need for technician visits, very often from external service providers, which demands advanced data security. When external parties are on premises, you not only need to control their access to given elements of the infrastructure, but you also have to monitor time spent on tasks, track reports and share information (such as hardware status errors) with on-site technicians.

COMARCH SITE MANAGEMENT

To ensure business performance and data security throughout the service process, field service companies need to use various technologies. Our implementation combines the Comarch FSM mobile app, system identity access management (IAM) and Internet of Things (IoT) elements. With these systems capabilities merged together, businesses may take advantage of an end to end, comprehensive solution which is modular by design and easy to implement. To facilitate tasks performed on-site by field staff, Comarch enables two types of site management, passive (A) and active (B), depending on the level of technician engagement needed.

A. PASSIVE SITE ACCESS MANAGEMENT

With passive site access management, field service workers are able to optimize service visits with automatic assignments sent by beacons IoT elements. When the field worker enters the range of a Comarch beacon with an active instance of the field service mobile application, they are notified of the proximity of the object. The technician receives a “preventive maintenance” notification, together with a new task visible in their schedule. Field staff can also display a detailed description of the object and perform remote diagnostics, with results readily available in the mobile device. Moreover, the integrated Comarch IoT beacon management ensures that only authorized personnel are allowed to connect with the beacon, and the server is notified when and to whom access is granted. With this solution, you are able to track the time that an internal or external worker spends in a given location, and compare this information with the time expected. All described functionalities can be accessed easily from the back office.
B. ACTIVE SITE ACCESS MANAGEMENT

Handling access to many different places can be a challenge without a central management point. Thanks to the Field Service Management system’s integration with Comarch Identity Access Management (IAM), a dedicated person can manage access lists in real time. The IAM endpoint sends data from the monitored area to the IAM server. Its inputs are connected to a set of access detectors (monitoring motion, temperature and humidity), while its outputs control electric locks and trigger systems. The entry authentication in a facility protected by IAM endpoint is performed by the tPro Mobile token application enabling user verification with PIN or pattern, which is installed on a device with an instance of FSM Mobile. That means the technician’s device is the only thing they need in order to access any places they have authorization for. Comarch FSM system triggered by sensors, can establish whether a person entering a protected area is in possession of the above applications and has the correct access rights, and decide to allow or deny access. All communication between the modules is secured by elliptic curve cryptography (ECC), in order to maintain a high level of data security. What’s more, having a central management point simplifies auditing and reporting processes.

For more information or to request a demo about Comarch Field Service Management system, please contact us:

fsm-enquiries@comarch.com
Since 1993, Comarch's specialist telco solutions business unit has worked with some of the biggest telecoms companies in the world to transform their business operations. Our industry-recognised telco OSS and BSS solutions help telecoms companies streamline their business processes and simplify their systems to increase business efficiency and revenue, as well as to improve the customer experience and help telcos bring innovative services to market. Comarch’s telco solutions customers include Telefónica, Deutsche Telekom, Vodafone, KPN and Orange.