



ServiceMax for the Telecom Industry

Driving reliability, efficiency, and customer experience.

The Telecom industry is at an unprecedented crossroads. Carriers are constantly challenged to rationalize networks and offer improved and expanded services to end customers—through the use of small cells, network densification (adding more cells to serve more customers), and spectrum efficiency improvements. To meet future demands, carriers are making massive investment decisions for upcoming 5G wireless network and fiber optic buildout (needed for secure and fast data transmission over long distances) resulting in low free cash flow. There is intense pricing competition amongst carriers, causing lower margins and ARPU (average revenue per user). To add to the competitive pressure, cable and media operators are entering the telecom market.

To thrive in this challenging environment, players (carriers, equipment manufacturers, distributors, ISVs, and service providers) in the telecom ecosystem need to ensure high reliability of mission-critical network equipment, optimize service operations, and exceed customer expectations. Doing so will ensure a high Quality of Service (QoS) for end customers, which will reflect through KPIs like Average Revenue Per Site (ARPS), Answer Seizure Rate (ASR) and Network Efficiency Ratio (NER).

Optimized network infrastructure service in action

9% INCREASE IN EQUIPMENT UPTIME

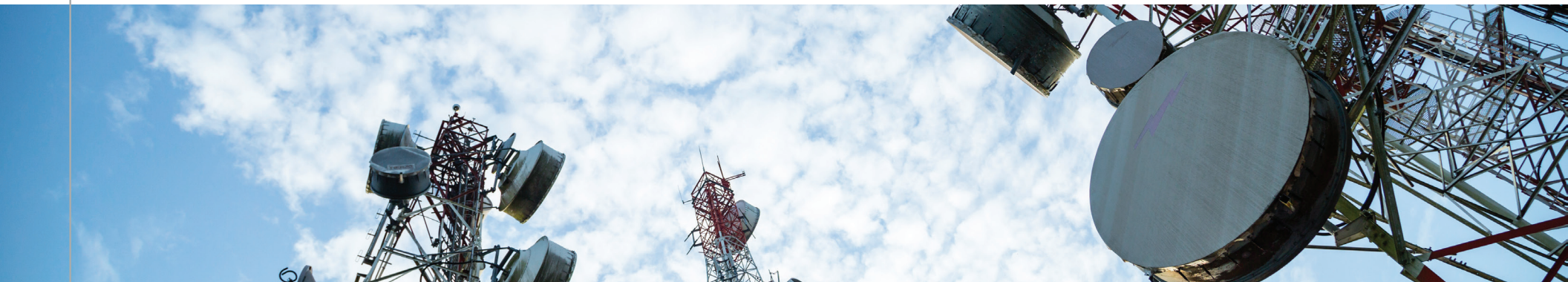
19% INCREASE IN TECHNICIAN PRODUCTIVITY

11% INCREASE IN NET PROMOTER SCORE

16% DECREASE IN REPAIR TIME

12% REDUCTION IN SAFETY INCIDENTS

GE Digital average customer results from 2018 Customer Survey



ServiceMax from GE Digital delivers an end-to-end field service management platform to address all aspects of field service operations, so that telecom carriers and service providers can ensure high levels of equipment availability, service efficiency, and customer experience. By leveraging the capabilities of ServiceMax, service technicians can be more efficient in troubleshooting cell towers, base transceiver stations, transmission lines, and more, improving network uptime for carriers and cell service for end customers without compromising on safety compliance. While telecom service providers gain from higher service capacity and revenues, carriers can scale their network operations by leveraging third-party contractors to support seasonal fluctuations. By connecting with the Industrial Internet of Things (IIoT), ServiceMax drives smarter decisions and faster execution—helping your telecom operations run more efficiently.

Benefits

Improve network service efficiency

- Dispatch your cell tower technicians based on their skillset, qualifications, certifications, availability, or other pre-set conditions. Drag and drop work order assignments so you can effortlessly schedule the right technician for the job.

Equipment visibility and performance

- Ensure real-time visibility into the performance of your equipment through Installed Base functionality and detailed analytics dashboards.

Leverage preventive maintenance for network equipment

- Leverage time-based or conditions-based maintenance for your capital-intensive cell sites, transmission towers, and microfiber infrastructure—in combination with IIoT integration—to shift from reactive to proactive maintenance.

Arm your crew with modern productivity tools

- Make your service staff, whether employees or contractors, productive on any mobile device (lookup parts, review work orders, debrief efficiently, leverage knowledge base, and more), even in remote areas with no internet connectivity.

Improve compliance and safety

- Enforce safety of your network equipment and technicians per NEBS compliance and OSHA people safety standards through checklists with step-by-step instructions or capture cell site maintenance data to minimize safety risks.

Scale your operations

- With an easy to use cloud-based platform, ServiceMax is scalable to the needs of your growing field network operations.

Delight your customers

- Superior network equipment maintenance translates to higher network performance and QoS for end customers, leading to less subscriber churn and better reviews.

Capabilities

Smarter planning and scheduling

Optimizing work allocation per business objectives

- Optimization Engine analyzes your telecom equipment's location, the whereabouts of your technicians, their certifications, training, skills, and the priority of the issue—resulting in a recommended technician to assign to the work order. Automatic scheduling is continuously tailored to your business priority outcome—whether it is reducing travel time, or optimizing cost, or maximizing SLA attainment—freeing up your dispatchers to focus on higher-value tasks.

Schedule with ease

- The Advanced Scheduling dispatch console is highly visual, allowing dispatchers to view the latest schedule and drill down to each technician, prioritized by skillset, availability, and location. With simple drag and drop functionality, you can trigger scheduling of critical maintenance of your telecom equipment.

Third-party contractor management

- 3rd-party contractors play an increasingly important role in Telecom. ServiceMax 3rd Party Contractor Community allow service providers to assign work to and manage schedules for partners; let partners complete and debrief work; and enable both service providers and partners to collaborate in real-time and track performance metrics.

Equipment visibility and performance

Track equipment history, configuration, and location

- Installed Base Management ensures you have real-time and accurate information on your telecom assets throughout their 25-year lifecycle. Before accepting a work order, your field technician can learn about equipment's service record, manufacturing information, exact location, and other critical data.

Preventive maintenance

- With ServiceMax, you get the best in preventive maintenance management, from automated work order creation with set schedules featuring different visit frequencies and dynamically planned to automatically adjust maintenance intervals for work order creation, to full condition-based plans that allow you to right-size your maintenance work, stay proactive, and delight your customers.

Integrate with IIoT and APM

- Picture this scenario: an IIoT or APM (Asset Performance Management) diagnostic identifies a transmitter issue, triggering a work order in ServiceMax. The crew is dispatched to execute the necessary service, avoiding a costly failure and ensuring cell tower availability. That service record is fed back to further improve reliability models, completing the virtuous circle of connecting ServiceMax and IIoT/APM.

Mobile enablement and execution

Work offline

- Telecom projects may be in remote locations, but that shouldn't impede your field team's productivity. The Mobile Field Service app works regardless of connection, enabling service technicians to adjust schedules, order replacement parts, collaborate, update records, or add attachments. What's more, work that is performed offline is automatically synced once data connectivity is restored.

Checklists

- ServiceMax mobile checklists allow for contextual compliance instructions for telecom equipment and service technicians to be presented as multi-section forms, delivered alongside work order, location, and customer details.

Digital debrief

- Network service technicians can complete their work order debrief and collect data, eliminating the need for back office processing.

Service analytics

KPI dashboards

- ServiceMax provides out of the box service performance metrics for telecom providers—utilization, first-time fix rate, mean time to repair, repeat visits—so you can manage what you measure and delight your customers.



About ServiceMax

ServiceMax, from GE Digital, leads the global industry of field service management software—an estimated \$25 billion market worldwide. The company creates solutions for the 20 million people globally who install, maintain, and repair machines across dozens of industries as the leading provider of complete end-to-end mobile and cloud-based technology for the sector.

About GE Digital

GE Digital is the leading software company for the Industrial Internet, reimagining industry's infrastructure by connecting software, apps and analytics to industrial businesses to drive a Predix-powered world. GE Digital creates software to design, build, operate and manage the entire asset lifecycle—enabling industrial businesses to operate faster, smarter and more efficiently. For more information, visit www.ge.com/digital.

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