



T-Mobile Case Study

Getting Service Down to a 'T'

T-Mobile is a leading mobile communications provider with subsidiaries throughout the world. In the UK alone T-Mobile serves 12.4 million customers who make over 260 million calls per week. Revenues are derived through voice calls, and data calls. Providing quality network coverage so that customers can make calls reliably from their mobile phones is critical to the success of the business. To guarantee performance, T-Mobile constantly monitors the network and employs over 200 field-based technicians to maintain and upgrade its multi-thousand base stations. Internal SLAs require response and fix times depending on the severity of fault. For example, faults affecting the service most seriously require an engineer to be en-route to the site within 15 minutes. Any delay has the dual cost in customer satisfaction and lost revenue. Processes employed to complete this critical work were previously heavily reliant on the exchange of information via telephone and paperwork, which was a heavy overhead on the technician's working day. The technician would also have responsibility to co-ordinate all resources, such as parts, contractors, experts in mast climbing, access to sites and colleagues based at switch centers if required to complete the job.

Challenge

"Although at the time we felt that we were working efficiently, the biggest problem was that engineers were simply spending too much time on the telephone, driving, awaiting instructions, or performing administrative tasks. Also, we weren't able to use enough of the information that was gathered in the field for the benefit of the maintenance operation as a whole," said Steven Boyne, T-Mobile Project Manager.

"At the time, the business environment meant that the simple solution to the problem of employing more service engineers just wasn't an option. Instead, we decided to invest in the future and introduce a new system to manage the mobile workforce, optimize work schedules and provide quality data from the field which we can analyze and make better decisions on how to improve the network."

Solution

T-Mobile selected an Aspective mobile workforce management solution based on ViryaNet Service Hub software following a detailed review of alternative solutions. "We chose Service Hub because it met all of our requirements, offered great flexibility for the future, and came with excellent references.

Based on our experience we decided not to integrate components from multiple vendors which ruled out many of the alternatives which had third-party schedulers, third-party mobile technology, or simply didn't satisfy all of our needs," said Boyne. "We were also very impressed with the Aspective people and their focus on delivering business benefits rather than just a software implementation. We always felt they were the right partner to help us introduce new best practice processes and carefully manage the reorganization and change that we required."

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"... Utilizing ViryaNet's workforce management solution, T-Mobile has achieved a substantial increase in the number of jobs completed per technician and improvement to the service levels achieved. We would not hesitate to recommend ViryaNet to organizations seeking a best of breed mobile workforce management system." Steven Boyne, Project Manager, T-Mobile

Process

As part of the project, a new centralized planning department was created at T-Mobile to drive field service performance and ensure operational efficiencies were achieved. This department coordinates activities between field technicians and third parties, and books appointments for exceptional situations to ensure SLAs are achieved. The new structure reduces the administrative burden on field engineers, freeing them up to concentrate on network maintenance.

With the new system field operations, work at T-Mobile is originated in legacy SAP and Remedy systems that are tightly integrated with ViryaNet's mobile workforce management solution. Once in the system, new work is scheduled either manually or automatically through the optimization engine, and advance appointments can be locked into the schedule and multiple activities coordinated. Individual work is dispatched to the field technicians over the T-Mobile GPRS network. Planners, supervisors and management all maintain real-time visibility of work progress on a color coded dispatch board that includes status changes such as "acknowledged", "en-route" and "onsite" through to "complete". The system automatically generates alerts for work in jeopardy of exceeding its respective SLA.

Field-based technicians are equipped with ruggedized Panasonic P1 Toughbook PDAs to receive and manage their work without always needing to be connected to the network. Detailed job information is delivered to the PDA giving the technician valuable data including work description, originator, SLA, site directions, access details, hazards and fault history on the site. In turn, technicians update work status and log completion details, which are then immediately available to Planners and also fed back into source systems.

The system is able to cater for complex workflows such as where a particular job is on hold, while waiting for parts, multi-man crews and or third party appointments. Other user communities participate in the workflow including supervisors who maintain their technicians' shift calendars and the estates department which interacts with external contractors for specialist site work.

Results

Peter Chubb, Network Operations Director and project sponsor said, "This project is fundamentally important to T-Mobile and our strategy to offer the most reliable network availability to our customers. In only a few months since the system went live it has far exceeded expectations. Engineers now spend more time doing productive work and we are able to react more effectively when a fault occurs that could impact service to customers. We also now have the tools in place to analyze our business constantly and continue to drive improvement."

For the first time, T-Mobile has access to dynamic and accurate information from the field for activity reporting, performance measurement and fault diagnosis, and this has supported a major transformation.

"Before Service Hub, we spent most of our time "fire fighting". Now we are able to identify and find the root cause of repetitive faults and plan preventative maintenance before they occur at other sites. This results in less service affecting issues and, therefore, better network availability for our customers," said Chubb.

By using its own network for wireless data communication to PDAs, T-Mobile has also been able to gain first hand experience of network performance in a business environment. "Feedback from our own use of Service Hub has been instrumental in helping T-Mobile drive improvement and ensure that we offer the best choice of network for mobile data users in the UK," said Chubb.