CASE STUDY

Swisscom Uses Motorola MC70s and LogObject's "mLogistics" to Optimize Field Engineer Scheduling

"We realized that the way we scheduled and coordinated our field service engineers was fairly flawed," said Urs Basler, Senior Project Manager at Swisscom. "It depended a lot on the knowledge of the dispatchers, and engineers could often be given very little time to get between sites on opposite sides of a valley. The new mobile computers have really helped us to update our scheduling and dispatch procedure. We now have more information about what our engineers are doing and can provide them with much more information to help them with the job being done."

Urs Basler, Senior Project Manager at Swisscom

The company: Swisscom

Swisscom is the largest telecommunications provider in Switzerland. Established in 1998 as the successor to the state-owned PTT (Post, Telephone and Telegraph) business, it employs around 20,000 people and serves homes and businesses across Switzerland.

The challenge: Providing field engineers with up-to-the minute information

Swisscom employs around 900 service engineers across four different business sections. Previously, at the start or end of each day, each service engineer received an updated work order. The engineers in each business section used different kinds of technologies for receiving these work plans and for reporting back to the business. The fulfillment section, for example, were using paper and pens, and receiving their work order via fax, whilst the assurance section had company laptops, which they would connect to the company network to receive their work schedules.

The degree of interactivity between engineer and dispatcher was relatively one-way, with urgent work being prioritized on a discretionary basis. Job scheduling relied a great deal on dispatcher knowledge of Swiss geography

Customer profile

swisscom

Company
Swisscom

Location
Switzerland

Industry
Telecommunications

Motorola products
- MC70 Enterprise Digital Assistant, Service from the Start

Applications
- mLogistics

Partner
- LogObjects (ISV) mobit (Solution Provider)

Benefits
- Technician productivity improved by 10%
- Dispatcher efficiency improved by 20%
- Complete transparency in scheduling engineers day-to-day work

as the system based its calculations on the distance between two points, using a straight line. This was seldom correct because of Switzerland's hilly geography, and consequently getting job scheduling correct was highly dependent on local knowledge. Swisscom was keen to improve the quality of the information going to and from the engineers and dispatchers, whilst simultaneously automating a significant amount of the work order and scheduling process.

"We realized that the scheduling and coordination of the service engineers was intrinsically flawed," said Urs Basler, Senior Project Manager at Swisscom. "It depended a lot on the knowledge of the dispatchers, and engineers could frequently be given very little time to get between sites on opposite sides of a valley. We were also keen to standardize how all of our field engineers communicated with, and received data from, the dispatchers as some of them were still using faxes and notepads, which meant that we could only send them one work order each day."

The solution: Motorola MC70 and LogObject's "mLogistics" application

Swisscom worked with two partners – ISV LogObject and solution provider mobit ag – and Motorola to find a solution to the challenges that it faced. Swisscom was keen to use the mLogistics software package from LogObject, and trialled it on a number of mobile computers including devices from HTC, BenQ, Nokia, HP, Sony Ericsson and Motorola.

"Our decision was largely application-driven," continued Basler. "We wanted to use the mLogistics application and had a checklist of features that we needed from a mobile computer, including the ability to route data and to be robust enough for use in the field. The Motorola MC70 enterprise digital assistant was the only device which ticked all of our boxes."

Swisscom chose the MC70 with GPRS / EDGE, but without WLAN capabilities. The MC70 integrates seamlessly with the mLogistics application, and field engineers receive information in real-time about their schedule of jobs, the materials needed and the problem itself. Swisscom's first point of contact for customer enquiries and problems is a telephone line, and if the problem cannot be solved remotely, an engineer is dispatched. The information from the customer on the helpline is relayed directly to the engineer via the MC70s so that they do not waste time repeating basic repair procedures which have have already been attempted by the customer over the phone.

New tasks can be sent out to the engineer every three to seven minutes over GPRS, allowing Swisscom to monitor and manage its engineers in

the most optimal fashion, providing the best possible customer service. The MC70s also allow the engineers to stamp the completed stages of each job with the time, so when they arrive at a customer site, start and finish the job, this information is logged and sent back to Swisscom to aid with scheduling the rest of the working day.

In addition, because the MC70s are mission-critical devices, Swisscom chose to use Motorola's 'Service from the Start' support and maintenance service. This ensures that if there are any problems with a device, Swisscom can be confident that it will be repaired or replaced within 24 hours, eliminating lengthy disruption to the engineers' schedules.

The results: Improved scheduling and visibility of engineers; improved customer satisfaction

As a result of using Motorola's MC70 mobile computers and the mLogistics application to organize their time, field service engineer productivity has improved by around 10 percent. Swisscom has significantly improved visibility of the engineer's activity, and now knows exactly when they start and finish a job and how long each job takes, so that they can reprioritize or shuffle jobs if they overrun. It has also allowed the company to improve rescheduling in the event of an urgent job coming in, because the dispatchers have better visibility of the engineers' schedules and engineers' activity.

The mLogistics application stores more information and calculates routes more intelligently than the previous system so the dispatchers do not need to have such a good understanding of geography and do not have to guess how long it will take engineers to travel from one location to another. As a result, dispatcher efficiency has improved by around 20 percent.

"The new enterprise digital assistants have really helped us to update our scheduling and dispatch procedure," continued Basler. "The engineers found the mobile computers very easy to use, and the device can handle the knocks and bumps of a day on the road with our engineers. We also now have much more information about where our engineers are, which job they are working on, and can provide them with much more information about the job in question, improving efficiency and productivity and, as a net result, our customer relations."

About Motorola

Motorola is known around the world for innovation in communications. The company develops technologies, products and services that make mobile experiences possible. Our portfolio includes communications infrastructure, enterprise mobility solutions, digital set-tops, cable modems, mobile devices and Bluetooth accessories. Motorola is committed to delivering next generation communication solutions to people, businesses and governments. A Fortune 100 company with global presence and impact, Motorola had sales of US $36.6 billion in 2007. For more information about our company, our people and our innovations, please visit www.motorola.com.

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