

Better Communication Transforms Public Transportation

Public transportation is a benefit to millions of people around the world, and its importance is only growing in our crowded, oil-squeezed world. But the sheer logistics of moving so many people from spot to spot every day makes it a complicated proposition. Anything that can smooth out the process of getting people where they want to go is a huge advantage. And, thanks to the capabilities of rugged handheld computers, the public transportation system Swedish Rail (SJ) is offering passengers a significantly better experience.

Swedish Rail (SJ) adopted the M3 eTicket handheld solution to improve their somewhat old fashion transportation system. Now both employees and passengers have the latest information in any situation.

Keeping everyone up to speed

Every day nearly 100,000 passengers use SJ's trains, traveling between roughly 350 destinations in electric vehicles that are designated "Bra Miljöval" (Good Environmental Choice) for meeting the toughest environmental standards in the world.

But while SJ's environmental efforts are cutting-edge, their communication technology had been old-fashioned. Timetables were available only in printed versions, and daily changes and updates were printed out in reports that were not only paper-intensive but also out of date nearly the minute they were printed. Workers were equipped with computers, but the handhelds lost their connection to central information as soon as they were unplugged each morning to take into the field. The system worked fine – if nothing went wrong, and everyone booked their tickets ahead of time and didn't change them. Anyone who's ever used public transportation can attest that this isn't the situation very often.

Thorough research identifies a solution

It was obvious that a communications technology update was needed. To ensure that they made the right choice for a new handheld device, SJ formed a user reference group made up of onboard crew members, who used and evaluated different devices and gave their input toward a new choice. The reference group chose the M3 eTicket solution, consisting of the durable M3+ mobile computer from Handheld and an integrated mobile e-ticketing application developed by Arcontia AB.

The slim M3 eTicket solution features a rugged handheld that integrates a smart card reader, GSM/GPRS, WLAN, barcode scanning, Bluetooth and a camera. The handheld can survive drops from 1.5 meters and can withstand dust and water as well as temperature extremes. The integrated smart card reader from Arcontia is developed specifically for public transportation systems and supports various ISO 14443 type A/B standards, including the entire MIFARE © family.



Challenge

To implement a modernized communication and eTicketing system that would also provide updated information on board the trains of Swedish Rail (SJ).

Solution

The SJ user reference group chose the M3 eTicket solution that integrates a smartcard reader and communicates with the SJ central office via GPRS.

Result

Besides reading e-Tickets, the on board crew gets real time information on bookings and timetables. The overall effect is a superior customer service.



Handheld is a world wide supplier of rugged PDAs and handheld computers. All our products are ruggedized and can withstand water, dust, drops and vast temperature changes. Handheld and its partners deliver complete mobility solutions to businesses in industries such as logistics, forestry, public transportation, construction, military and security.

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Increased capabilities = better service

The improvements the new M3 eTicket solution delivers start first thing every morning. The new devices have far more data capacity than the old ones, and when a SJ crew member logs on at the beginning of the day, the handheld is loaded with the latest bookings, timetables and changes. And that information is updated immediately throughout the day if anything changes – a major upgrade from the previous system. This lets the crew members know when someone has purchased a ticket just minutes before boarding, and also allows the crew to inform passengers of any delays or timetable changes that occur, even mid-trip. For crew members, this helps them avoid the helpless feeling of being without an answer to passengers' questions.

As far as actual ticketing tasks, the M3 eTicket solution reads ticketing information from smart cards and SMS messaging, can issue tickets and take credit card payments, and even print receipts using a small, rugged Bluetooth printer. The crew also uses the M3 eTicket solution to count travelers and report faults, freeing up the crew members to spend more time providing service to customers. Finally, delays in traffic can be reported in both directions: from the M3 device back to a central office, or from the office out to all the handhelds. The overall effect is a superior customer-service experience for passengers.



For more information about the M3 eTicket, visit www.ruggedm3.com or www.handheldgroup.com

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