AN INNOVATIVE WIRELESS SOLUTION HELPS KEEP DUTCH TRAINS ON SCHEDULE

NEDTRAIN

/// CASE STUDY

EDS an HP company

To service the Dutch Railways fleet, NedTrain keeps a large work force of maintenance technicians and dispatchers on duty 24/7. To deploy staff more efficiently, the company had been considering implementing a mobile solution to keep workers connected in the field. EDS, an HP company, developed a pilot project to assess the effectiveness of the new processes and technology.

CLIENT PROFILE

www.nedtrain.nl

Charged with the continuing safety and reliability of Dutch trains, NedTrain performs both active and preventative maintenance to ensure all systems operate flawlessly.

Industry: Transportation

Headquarters:
Utrecht, Netherlands

Business Need Addressed:
Productivity

Could wireless devices be operated reliably within the heavily electrified train station environment? Would users be willing to use the technology? EDS designed a pilot program to help NedTrain find out.

NedTrain wanted a mobile solution to dispatch staff more efficiently

Keeping Dutch Railways' fleet of 1,500 trains and 2,600 kilometers of track running smoothly is a round-the-clock challenge for NedTrain. As a daughter company of The Netherlands' railway authority, NedTrain performs both routine and emergency maintenance for all of the nation's passenger trains from 35 separate offices located across the rail network.

One of the company's most pressing challenges has been finding a way to dispatch its work force more effectively. While most work orders are placed in advance, unexpected delays and quickly changing maintenance priorities make it difficult for NedTrain to anticipate when and where workers and equipment will be needed. As a result, the organization has had to employ more full-time employees than it might ordinarily need to ensure that staff is always available to respond to emergencies, keeping it in compliance with the very strict service level agreements NedTrain promised Dutch Railways.

NedTrain recognized it needed a way to deploy staff more cost-effectively. Company leaders were very interested in seeing if enabling workers with mobile connections to the company's back-office systems, allowing them to automate many paper-based transactions, would increase their flexibility. While it seemed like an obvious solution, the company had several concerns. Could wireless devices be operated reliably within the heavily electrified environment of the train stations? Would users be able and willing to use the technology? And would it even be possible to integrate current-generation handheld computers with the company's legacy systems?

NedTrain turned to two competing vendors, including EDS, to design and implement pilot programs to determine whether these issues could be adequately addressed.

INTEGRATING WIRELESS WITH LEGACY

To help get maximum productivity from the wireless solution, EDS worked closely with NedTrain executives to determine exactly what functions they wanted to enable workers to perform. EDS' proprietary Process Sourcerer helped developers define existing business processes and design new ones to reflect NedTrain's newly mobile work force.

EDS used a client/server solution specially designed for wireless devices to connect remote employees with process managers located at a fixed site. Process managers are able to log onto the server through a standard Internet browser. Field technicians access the system through a dedicated client application device to process their work orders and synchronize data with the server. A custom application downloads and stores critical business data from NedTrain's legacy systems so that a continuous connection is not required to perform most basic functions.

Services featured

- Applications Development Services
- Integration and SOA Services
- Mobile Applications Services

EDS designed a pilot mobile dispatch program

EDS set up a pilot program for the NedTrain base operations at the central train station in The Hague, The Netherlands. EDS selected a number of handheld devices, ranging from units with the latest wireless technologies to others designed to withstand increased amounts of physical abuse. Then it defined the infrastructure, including how to transfer data from NedTrain's legacy systems to those wireless devices. To enable maximum productivity, EDS investigated the existing business processes, then helped refine them to better conform with the needs of mobile dispatching. After EDS engineers put together the necessary infrastructure and developers created the application to integrate mobile units with NedTrain's systems, EDS trained key users, and then tested the new application. EDS personnel stayed on-site throughout the program to provide immediate support, ensuring that operations at The Hague were not adversely affected by any technical glitches that arose. Finally, EDS evaluated the performance of the program, including surveying technicians and managers about the new processes, and reported our findings to NedTrain management.

NedTrain selected EDS-developed wireless solution

NedTrain went into the pilot program with three primary concerns: whether it would be possible to transmit real-time information wirelessly, whether that information could be integrated with its legacy systems, and whether a supplier was available who could develop the technology and implement it effectively within the train-station environment.

Within six months, EDS was able to develop and implement a solution that demonstrated conclusively that it was indeed possible to achieve these goals. Further, NedTrain users responded positively to the new system. The devices allow technicians to receive new work orders in the field and update the status of projects throughout NedTrain's information systems as they are completed, as well as make note of any special circumstances that might later need to be addressed. These process improvements are expected to have a significant impact on the speed of service delivery without requiring additional staffing.

NedTrain executives were also pleased with the system's performance. In fact, they discontinued the competing pilot program after two months to focus solely on the EDS-developed solution.

EDS, an HP company
5400 Legacy Drive
Plano, Texas 75024

phone: 1 800 566 9337
visit: eds.com
e-mail: info@eds.com

EDS
an HP company