Bridgestone: Enabling the Mobile Workforce for Innovative Service Models

Bridgestone – Global leader in tire technology and one of the world’s largest manufacturers of tires, employing over 130,000 people worldwide.

Overview

Bridgestone Europe follows a unique tire-as-a-service business model, where customers are charged by usage as well as tire wear and tear. Bridgestone’s business requires their dealers and service engineers to undertake inspections of tires on vehicles at various outdoor locations, often in difficult working conditions. Data needs to be obtained regularly from thousands of vehicles across numerous fleets.

Challenge

- Capturing the tire usage data (millions of data points) on paper was inconvenient and messy due to the tough weather and working conditions, and often resulted in poor data quality.
- Lost or incorrect data resulted in high operational costs and loss of revenue.
- Other challenges included ensuring data was captured only for the vehicles validated to be a part of the contract.
- Unavailability of real time data added to Bridgestone’s program management challenges.

The high cost of operation and risks involved resulted in poor acceptance of the tire-as-a-service business model by dealers, creating a serious business challenge for the company. An efficient solution for easy and error-free data collection during inspections was desired.

Solution

Persistent proposed an innovative and comprehensive solution that enabled Bridgestone’s dealers and service engineers to efficiently collect and update data from vehicles, leveraging a handheld device.

To demonstrate the potential of the solution, Persistent implemented a proof of concept application in 4 weeks, which was demonstrated to key stake holders at Bridgestone, including several of their dealers in Europe. With buy-in from the end users, the actual solution development was undertaken. End-user focused innovations, such as a virtual numeric keypad, added to the development of an intuitive user interface, with an eye toward service engineers’ daily workflow. Persistent also conducted training sessions to ensure the end-user’s familiarity with the solution. The application was built using the Microsoft .NET Compact Framework and later ported to other devices including Symbian/J2ME.

The solution was targeted for deployment at approximately 2,000 dealers (3,000-4,000 fleets) in more than 15 European countries – all integrated seamlessly with Bridgestone’s centralized ERP and CRM applications in Brussels.
Solution Feature Set

- Data entry and updates on the hand held device in disconnected mode, freeing the engineer from the need to have continuous, uninterrupted network connectivity
- GSM/GPRS connectivity to allow users to access, upload, and download information securely from the central ERP and CRM applications
- Fax/Email reports from the hand held device
- Internationalization and localization for all major European languages
- Rich, user-friendly interface with sound cues, optimized according to the end-user profile

As Bridgestone Europe’s software engineering partner for over six years, Persistent has played an important part developing and driving the company’s mobile strategy.

Business Value

The field force solution developed provided more than 800% improvement in productivity for Bridgestone’s service engineers and dealers.

Benefits to Service Engineers and Dealers

- Better technology that enables capture of tire usage data even in harsh weather conditions
- Improved accountability – elimination of manual errors
- Enhanced responsiveness - ability to access data in the field enables service engineers to respond quickly and efficiently on the spot, improving decision making and time-to-revenue
- Ease of use, with suitable keypads and UI boost productivity
- Improved end-user satisfaction, with solution availability on a variety of devices and handsets such as Win Mobile, Blackberry, iPhone and Symbian/J2ME devices

Benefits to Bridgestone

- No revenue loss due to incorrect or lost data
- Cost and time savings – Eliminating manual entry of field data into the system resulted in substantial time and cost savings
- Improved accuracy – eliminated data entry errors and loss of data due to misplacement and mishandling of the paper forms

Key Benefits

- 800% field productivity gains
- Revenue loss averted through accurate and timely data
- Data collection (and billing) occur regardless of inclement weather
- Significant gains in customer approval for new business model with enhanced responsiveness
- Full integration to existing ERP and CRM for streamlined workflow
- Solution ported to all Bridgestone-relevant devices including RIM, iPhone, WinMob, Symbian reducing operational and training costs

Awards & References

- Won for Innovative mobile strategy, for Bridgestone, EU
- Bridgestone mobile strategy example referred by CK Prahalad & MS Krishnan

About Persistent Systems

Persistent Systems (BSE & NSE: PERSISTENT) builds software that drives our customers’ business; enterprises and software product companies with software at the core of their digital transformation. For more information, please visit: www.persistent.com