A Two Technologies Case Study

Sheehy Mail Contractors, a transportation company specializing in truck load freight and postal contracting, continually strives for innovation and process improvement. Operating in a dynamic, transportation environment, it's not uncommon for the carrier to be faced with complex scheduling requirements, such as managing loads that are booked on a daily basis while administering still others that must adhere to precise, predefined schedules. They must also manage increasing fuel and labor costs.

In order to better compete under such unflagging conditions, Sheehy initiated a project to explore automation and real time information exchange.

The three top challenges this initiative had to address included: rising fuel costs, increasing office workload and driver paperwork, and tight scheduling constraints leading to missed appointments. Overall, Sheehy's objective was to integrate all aspects of fleet operations with data flowing seamlessly between ordering, dispatching, route execution, billing, accounting and payroll.

Sheehy then turned to LoadTrek.net, in Sun Prairie, Wisconsin, which provides a flexible, subscription-based, driver and vehicle management solution. Designed for simplifying the entire operations process, including dispatch





ing, load management, real time asset tracking, electronic DOT and fuel tax data collection, LoadTrek.net incorporates Two Technologies' JETT® • ce rugged, handheld computers as the onboard interface for communicating information between the truck's onboard computer, the driver and the home office.

A Tighter Fleet: Fuel Efficiency, Regulatory Compliance, Effective Communication

With rising fuel costs on the minds of all Trucking companies, one of the highest priorities Sheehy Mail Contractors set was improving fuel economy across their fleet. With an already solid 6.8 mpg fleet average, the firm set its sites on an even more competitive 7.5 mpg average with the ultimate goal of substantially lowering its fuel expenses.

By capturing and analyzing behavioral data in the field the LoadTrek.net solution is able to address these goals. The JETT • ce, integrated to the onboard computer, records fuel usage and other driving data which are then fed into LoadTrek.net software where they are ana-

"Finding new and improved efficiencies is important for growing Sheehy Enterprises. By staying on the leading edge of technologies that enable us to automate our processes, like LoadTrek.net, we're able to find costs savings that give us the edge against our competition."

- John Sheehy, president, Sheehy Mail Contractors

• THE COMPANY



•• •• THE INDUSTRY

Transportation and Distribution, Trucking, Truck Load Freight

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Rising fuel costs

Increasing office workload and driver paperwork

Tight scheduling constraints leading to missed appointments.

• THE SOLUTION

Loadtrek.net, provides a driver and vehicle management solution, incorporating Two Technologies' JETT® • ce handheld computers as onboard interfaces for communicating between the onboard computer, the driver and the home office.

• THE RESULTS

Fleet mileage increased from 6.8 mpg to 7.6 mpg

Fuel expenses decreased \$350,000 per year

Driver productivity increased, as drivers save 20 minutes per day on paperwor

Dispatchers ratio improved to 1:60 dirvers

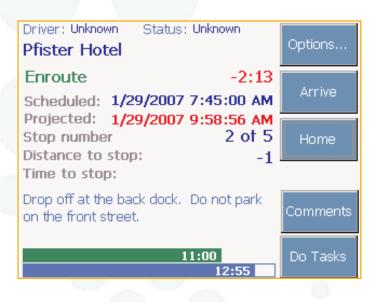
Increase in customer satisfaction

lyzed. Problems can then be isolated. The system allows managers to monitor planned miles driven vs. actual miles driven, thus lowering the amount of fuel consumed. And by analyzing fuel consumption, the system helps identify the most effective equipment configurations, in order to help build the most efficient fleet.

The system helps create additional efficiencies by decreasing the amount of paperwork the drivers must complete and by lowering the workload of personnel in the back office. To achieve this, the LoadTrek.net system is used by Sheehy to maintain compliant DOT logs and fuel tax reporting.

Using the JETT • ce, the DOT log is automatically calculated and displayed in a numeric or grid format, making it easily accessible to driver and supervisor alike. LoadTrek.net also automates and streamlines the fuel tax process. State miles are captured automatically by on onboard computers, fuel prices are recorded using the JETT • ce, and trip reports are easily generated by the system.

The web-based features of LoadTrek.net provide Sheehy's drivers and customers real-time access to an array of pertinent information. Drivers log into the system to check their assignments, validate timecards and print the reports they need. Sheehy's customers also benefit, as they're able to request service online, view information on their pending and completed loads, view rate information and track transaction history.



In order to better manage narrow scheduling constraints, the system monitors route progress, proactively forecasting and resolving late arrivals and departures and improving overall schedule compliance. Route information - containing a list of all stops, scheduled or estimated delivery times, and projected travel times and distances, - is downloaded onto the JETT • ce hand held computer. During the course of the day, the onboard computer generates route statistics while the assignments are being executed.

Customizable, Rugged Handheld Computer is the System's Fifth Wheel

When choosing a hand held computer to be part of its solution, LoadTrek.net was looking for a diverse mix of features that they felt would allow them to achieve the most complete solution for their customers. Their vision was to create competitive advantage by designing a custom hardware configuration that could uniquely address the markets they serve. They outlined a list of criteria that would be difficult for any one vendor to address.

- Ease of programming
- Windows CE 5.0 commercial grade operating system (vs. Windows Mobile)
- Ability to provide private labeling, implementing custom external look and design
- Great keypad choices for more intuitive user experience and lower support costs
- Long product lifecycle
- · Economic product cost

"Two Technologies' JETT • ce handheld computer is a key component of the LoadTrek.net system, since it collects data in the field and acts as the driver's interface to the LoadTrek.net system.. It's rugged, it's adaptable, and, it's easy to use, all of which make it ideal for the distribution and trucking industry." - Egor Korneev, LoadTrek.net

After considering many options, LoadTrek.net chose Two Technologies, in Horsham, Pennsylvania, for their ability to deliver the products and the support that could meet these needs. The company's JETT • ce handheld computer has become an integral part of the entire on-board system.

Serving as the system's operator interface, the JETT • ce interfaces serially with the onboard computer, allowing the driver to request and enter information using either a keypad or a touchscreen. Here the various processing and display takes place, including DOT logs, routing, messaging, and behavioral reporting.

The JETT • ce plays a particularly important role in route processing. The drivers use the JETT to request their routes, as well as to display route stop sequences, delivery times, instructions and driving directions. The unit collects information, such as arrival and departure times, time in transit, late arrival notifications, miles driven, and items delivered, communicating data back to the LoadTrek system for further analysis.

"The JETT • ce was the right handheld device to fit our overall solution. It really was the only device that matched our selection criteria 100%." • Egor Korneev, LoadTrek.net. The JETT • ce also compiles driver behavioral information such as hard braking, hard accelerations and mileage, presenting actual performance statistics back to the driver for in-route adjustments. For DOT compliance, the raw information is first collected and stored on the onboard computer. It's then processed and displayed in a usable format on the JETT • ce.



A Solution in Overdrive

Sheehy Mail Contractors reports substantial results since its implementation of the Loardtrek.net system, featuring the JETT.ce handheld computer. The company was able to meet or exceed all the goals established for the project, achieving success across a broad spectrum of measurable, key performance indicators.

By monitoring and improving driving habits such as hard accelerations and driving speeds, Sheehy was able to exceed the pre-project goals for fuel economy with a new fleet average of 7.6 mpg. By monitoring planned miles driven vs. actual miles driven and thereby decreasing out of route miles, they were able to decrease fuel expenses an additional \$350,000 per year.

The automation inherent in the LoadTrek.net solution has helped Sheehy to achieve their goal of a more paperless office. Automation of DOT logs and tax reporting has improved compliance and eliminated paper-based reporting, such as driver compiled trip reports saving an addition 20 minutes per day per driver.. Spread across all 120+ drivers, the savings are extraordinary.

LoadTrek.net's scheduling and routing capabilities have had a positive impact on overall customer satisfaction. Customer service has been improved as warnings of potentially late deliveries and dynamically generated scheduling changes can often address major issues before all customers are affected and eliminating many situations that would have caused dissatisfaction in the past.

And finally, giving both drivers and customers remote access to the LoadTrek.net system via the internet has resulted in a more effective and slimmer workforce. Since implementation, Sheehy has been able to decrease phone interactions, allowing them to employ one dispatcher per 60 drivers versus the industry standard of one dispatcher per 20 drivers, resulting in significant cost savings.

Screen shots from LoadTrek.net and MobileTrek

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"The ability for Two Technologies to customize the unit to match our needs and deliver a unified brand-experience was unique. Our satisfaction with the JETT • ce has been reinforced by the relationship we've developed with the company. They've been a true partner, offering us support we couldn't get from any other vendor."

- Egor Korneev, LoadTrek.net.

"By implementing the LoadTrek.net system with its JETT.ce handheld computers, we've been able to recognize some very real and substantial tactical gains, but more importantly on a strategic level, we've been able to position ourselves for growth while aligning our operations favorably for just about any future competition."

- John Sheehy, president, Sheehy Mail Contractors

Driver: 124 Status: Not Driving			
Driving hours warn	Graphs		
Last DOT cycle:	Hours	Grapho	
Total on-duty:	01:06	(
Hours available:	68:54	Home	
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Todays's DOT:	Hours		
Driving	00:00		
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On duty available:	12:54		
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About LoadTrek.net

LoadTrek.net software is created by North American Dispatch Systems, a privately owned company based in Sun Prairie Waterloo, Wisconsin., The founders of North American Dispatch Systems have over 50 years of dispatching and fleet management experience.

The LoadTrek.net driver/vehicle management solution is designed to simplify the entire operations process by integrating it all into a single software/hardware package. LoadTrek.net functionality spans load assignment, routing, mobile asset tracking, DOT and fuel tax data collection, accounting, and real-time communication. Managers can also run extensive analyses to improve driver performance and increase business efficiency. LoadTrek.net performs a complex integration process and presents it in a simple structure that is reliable and easy to use. This allows for better dispatching and real-time monitoring. Companies looking to maximize efficiency should rely on LoadTrek.net for driver/vehicle management. www.LoadTrek.net

About Two Technologies

Two Technologies Inc. designs and manufactures customizable, rugged hand held computer and terminal products for global applications. With over 4,000 customers and one million products in the field, its devices are deployed worldwide, helping to improve operational efficiency and bottom-line performance. Founded in 1987, Two Technologies continues to be recognized for providing unsurpassed value and service to its VARs and OEM customers. The company has succeeded in leading its market segment by providing high quality, cost-effective, customizable products with industry-best customer service. The company's highly automated manufacturing and test facility in Horsham, Pennsylvania is a model for state-of-the-art, surface mount assembly and is certified to meet ISO 9001:2000 Standards. All standard products from Two Technologies are FCC and CE certified, and RoHS compliant.



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