Vehicle tracking services keep tabs on fleets

by Mike Freeman

Christopher Burgeson, fleet manager for the Northern California city of Napa recently got an e-mail alert saying the throttle sensor on one of the city's vehicles was not working right.

At best, that meant the vehicle was getting poor gas mileage. At worst, it meant the vehicle was in danger of breaking down out in the field, possibly resulting in an expensive tow and downtime for workers.

KEEPING TRACK - Diego Borrego, left, of Networkcar and Erick Covarrubias of an equipment supplier, Delta Group Electronics, work on circuit boards. CNS Photo by Nancee E. Lewis.

TRUCK TRACKER - Paul Washicko, president of Networkcar, shows off a device installed on a Carter Electric truck. CNS Photo by Nancee E. Lewis.

"That's something that's not going to be obvious to the driver," Burgeson said. "But is certainly something we need to know." Burgeson got the e-mail because about 20 vehicles in Napa's fleet are equipped with a wireless vehicle management system from San Diego-based Networkcar.

Networkcar's service, called Networkfleet, provides wireless vehicle tracking - a service that several other firms also sell.

But Networkcar's service goes beyond the Big Brother role of showing fleet managers where their workers are.

It also provides an avalanche of near real-time performance data about the vehicle, such as idle time, fuel consumption and engine problems.

It allows the company to monitor vehicle locations every two seconds. The service even performs remote smog checks. If customers enroll in the state-sanctioned smog check program, Networkcar remotely monitors

vehicle emissions and certifies that the vehicle is in compliance with state standards.

As a result, the vehicle doesn't have to go in for smog checks every other year, saving time and money for customers. And if there is an emissions problem, it can be fixed sooner.

"This is a lot more environmentally friendly," said Diego Borrego, founder of Networkcar and its engineering chief. "Vehicles get smog checked every two years. They could begin polluting the minute they leave the smog check station. With this, the notification is immediate."

Founded eight years ago, Networkcar got off to a bumpy start. It initially tried selling its tracking and diagnostic systems through auto dealerships as an add-on for car buyers.

It didn't work well. The company was sold to Reynolds & Reynolds, an original investor, in 2002. About three years ago, it began focusing on the light vehicle fleet market in hopes of boosting sales.

Today, the company's revenue exceeds $10 million, said Paul Washicko, the company's president. It employs 70 workers nationwide and has 22 patents or pending patents on its technology. Last year, Hughes Telematics acquired Networkcar from Reynolds & Reynolds for $17.7 million, plus the possibility of earn-out payments. Backed by Apollo Management of New York, a $26 billion investment firm, Hughes aims to introduce a new generation of telematics - a generic term for wireless technology in vehicles - to the auto market over the next several years.

Recently, it announced a deal with Chrysler to bring telematic hardware and services to certain Chrysler models.

"Hughes Telematics is looking to Networkcar to help bring these products to market and deliver these services," said Thilo Koslowski, an automotive technology analyst with the research firm Gartner.

Washicko couldn't comment on how Hughes Telematics' deal with Chrysler might impact Networkcar. But he said wireless diagnostics will move beyond fleet vehicles eventually.

"This will be built into vehicles someday, and it will be a consumer product at some point in the future," he said. "But just like a lot of industries, businesses are adopting it first." Randy Carter of Carter Electric researched fleet tracking systems for two years before deciding on Networkcar for his seven trucks. For him, the top selling point was that he could monitor vehicle locations every two seconds without a per-use charge. "It basically helps keep (employees) honest," he said. "Everyone will take advantage of the system if you let them."

But he also likes it that if a truck is stolen, Networkcar can track it. Some of his drivers take the trucks home. So he can create a "geo-fence" using the system so that if the truck travels a certain distance from the employee's house at unusual hours, he is notified.

Networkcar is one of a cluster of San Diego companies working in telematics. Qualcomm is the biggest with its Omnitracs system, which uses cellular technology to track mostly long-haul, semitrailer-style trucks.

Another firm, DriveCam, sells video cameras mounted in cars that monitor drivers. Like Networkcar, it has focused on fleet vehicles. But now it's also trying to break into the lucrative and much larger consumer market.

The idea for Networkcar began in 1997 when Borrego entered a Massachusetts Institute of Technology business-plan competition. He was a graduate student at the university at the time, after having worked for General Motors and its auto parts spinoff Delphi Corp.

Borrego's business plan took second place and earned a $25,000 prize. Two years later during the dot-com boom, Borrego and a couple of engineers from Science Applications International Corp. launched the company for real, raising money from Merrill Lynch, SAIC Venture Capital, and Reynolds and Reynolds.

The technology works like this. Networkcar installs a wallet-size device under the dash and small antennas in the vehicle. The device plugs directly into the car's main onboard diagnostic computer - connecting to the same port that auto maintenance shops use to find problems.

Networkcar taps the computer to wirelessly monitor the car. Networkcar works with Cingular Wireless, and customers access the data via a Web site. The units cost about $525 and can be installed in about one hour. The monthly subscription fee is $29.95, with a year contract.

Koslowski, the Gartner analyst, said GPS tracking in fleet vehicles is a growing market, with several competitors vying for top position.

But Washicko said there are 20 million fleet vehicles and a vast majority don't have remote tracking and diagnostics systems. "There is very low penetration in the light vehicle market," he said. "It's only about 7 percent penetrated today."

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