

WHITE PAPER: SPIREON - FAI FUTURE OF FLEET TRAILER TECHNOLOGY

The Future of Fleet Trailer Technology

Future-Proof Your Fleet and Retain More Drivers

Truck drivers represent the most worrisome constraint on U.S. economic growth right now.

Bloomberg made this assertion based on the driver shortage and the fact that the trucking industry represents 70 percent of the nation's freight volume by weight. And as freight rates continue to rise, so too do operating costs for American businesses.

ATA Senior Vice President Bob Costello adds color to this outlook by projecting a driver shortage totaling 175,000 by 2026. "The industry is in for a lot of hurt — so is the economy," Costello has said.

ACT Research reports that its For-Hire Trucking Index outpaced capacity in 14 of the past 15 months. Freight rates continue to rise as supply struggles to keep up with demand. Short supply means drivers have the power to pick and choose for whom they work.

In this climate, operational efficiencies can make the difference between whether your business can attract and retain capable drivers or will struggle to stay sufficiently staffed. New trailer and asset technologies streamline operations more than ever. But where does a trucking company begin?

TURN YOUR WORKFORCE INTO A COMMUNITY

Many fleets see technology as a cost center. However, if they mean to stand out and appeal to a very limited workforce, the latest trailer technology can have a significant impact on a driver's day-to-day routine and job satisfaction.



Providing a better in-cab experience not only gives companies an edge in the job market, but also creates efficiencies that benefit the job at hand. Tablets alone can bring navigation, smart ETAs (for both drivers and customers), and driver scorecards — even crowd-sourced information in which employees share notes on shippers and consignees. This can create a sense of community among a workforce that is otherwise disparate and remote.

ONE SUCH CASE: PAPER TRANSPORT INC.

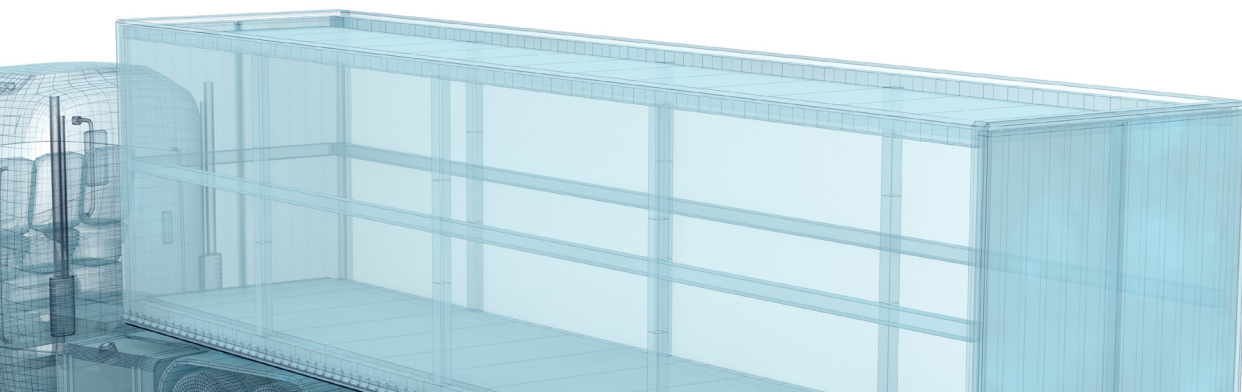
Paper Transport Inc. (PTI) is a Wisconsin-based full truckload provider with a reputation for being technologically progressive. The company's 700 drivers operate more than 730 trucks hauling 2,400 trailers throughout the United States — the Midwest and Southeast in particular — offering regional one-way operations with dedicated, intermodal, and brokerage services.

Reputed as an early adopter of trailer technology, such as telematics and electronic logging, PTI has been able to stay ahead of the curve on many issues that plague the trucking industry today. When sourcing its trailer telematics provider, its initial primary concern was the ability to locate assets in the field. The company soon found that adding cargo sensors would provide an added layer of awareness that would benefit its drivers.

“One of the single biggest frustrations for a driver is trying to find an empty trailer, so just knowing location wasn't going to be enough,” says Dan Deppeler, vice president, maintenance, at PTI. “We wanted to know the status of a trailer as well so we could push it right to the driver.”

PTI views the driver challenge — finding enough qualified drivers — as a top point of focus. “At PTI, we feel we have a really good home for drivers,” Deppeler continues. “For those that have been with us for more than two years, our turnover rate is less than 20 percent.”

By locating empty trailers right away, a fleet such as PTI's can run more efficiently. Geofencing alerts let its operators know when equipment that has been tagged for maintenance hits a repair facility. Automation pushes status updates into the company's TMS so that back-office staff works in one system rather than several screens. PTI also shares dwell reports with customers to help enhance box velocity.



WHAT TO LOOK FOR IN YOUR TECHNOLOGY PARTNER

The vetting process in choosing a technology partner can be daunting, but there are several boxes you'll want to be sure to check.



Influence the product roadmap — Does your technology partner facilitate product discussions on topics that affect your business? Better yet, does it have a customer advisory board on which you can participate? Your technology should work for you — features, design, and product testing — and your technology partner should show flexibility and capability that it will match your business needs.

Enabler of OLAP data — “Analytics” is a generic term for being able to process a mass of data. Online analytical processing (OLAP) is the technology behind business intelligence that includes relational databases, report writing, and data mining. Your technology partner should be able to process data coming in from thousands of trailers, filter out anything extraneous, and deliver relevant information that you can act on.

Timeliness — When we talk about analytics, there should be a distinction between producing the information and delivering the information. What good are analytics if they lay dormant? Getting information to the right person at the right time is as crucial as producing the information in the first place.

Benchmarking — Can your technology partner show you the number of turns per trailer at a landmark, then benchmark how long your trailer sits idle at that location versus the entire population of trailers at that same landmark? Are your trailers being detained longer than the industry average? The best analytics provide context.

Dashboards — Make sure you're able to drill down through dashboards. You should be able to view a particular group of assets or asset locations where an issue might exist.

Reports — Ensure that you're able to extract and view, sort, rank, and/or export a particular data set in which you are interested. You should be able to sort and rank the trailers where the most maintenance issues occur over a certain period of time.

Alerts — This is where the rubber meets the road. With alerts, you should be able to act upon anything that's happening with a fleet or trailer in real time. Reports are a historical view, but alerts are real-time. If a trailer is being tampered with, you want to know about it right away, not read about it in a report tomorrow or next week.

APIs — You might not want to receive all of your data in reports and dashboards. In that case, make sure you have access to it through your technology partner's API so your own in-house analysts can interpret and manage it. Also look for integration with your TMS.

Modular architecture — Modular hardware is flexible. It can adapt to any number of mixed fleet applications: variable reporting frequencies, solar for power-challenged deployments, etc. Your tech solution should interface not only with a variety of sensors, but other communications hardware as well. Make sure your technology partner has strong relationships with other component and cellular providers so that integration with smart trailers and other devices is centralized and easy.

MORE THAN BELLS AND WHISTLES

This may all sound well and good, but what's the practical application of trailer tech? First and foremost is preventative maintenance. Trailer tech should be able to provide actual mileage instead of time-based estimates. Integration with software such as TMW and McLeod can make the process seamless.

Trailer utilization is another tangible benefit. Your technology should help you rebalance trailer usage so all are used, rather than your drivers just picking up the newest trailer every time.

Be on the lookout for trailer technology that can ingest CSA violation data, for example, and correlate it to trailer and maintenance data to identify specific problem trailers. The possibilities are endless.

SPARE YOUR DRIVERS THE FRUSTRATION

All the items on your operational checklist, both analytical and practical, help set up your drivers to succeed. Having the proper systems in place can spare them 20 to 30 minutes trying to locate an empty trailer, finding out it is no longer at that location or isn't empty, then tacking on another 20 to 30 minutes hunting down the next one. This is the kind of thing that gets old quickly for drivers, and before you know, it they're off to find the proverbial greener grass elsewhere. You must be on the lookout for anything that reduces driver frustration. The long-term consequences are greater than they may seem.



THE BOTTOM LINE

In the face of rising freight rates and a shortfall of drivers to meet the demands of the industry, as well as the proliferation of smart trailers, telematics, and ELD compliance devices, it behooves every fleet to look into the benefits of trailer tech for both the present and into the future.

"I can remember back to 2003, when I started in this space, having one or two locations pinged per day from a trailer was fantastic," Deppeler recalls. "The outlook for what we are going to be able to do with all this data is going to be a game-changer for the industry."