



CUSTOMER EXPERIENCE

A new CRM and field service software solution has helped a global financial investment company increase efficiency and improve the customer experience, p.22.



DRIVER SAFETY

By implementing a new telematics solution and safety program, a fire and security company has reduced accidents by 68 percent and is saving \$2 million annually, p.24.

July/August 2017

Field Technologies

OPTIMIZE FIELD WORKERS, SERVICE & ASSETS

80-Year-Old Company Revamps Field Operations

Replacing paper forms with a mobile solution
saved Mission Linens \$300,000 per year, p. 6.

Dave Pattison,
director of IT,
Mission Linen Supply

**WITH GREATER VISIBILITY
YOUR FLEET MAKES STOPS.
YOUR BUSINESS DOESN'T.**



ZEBRA

VISIBILITY THAT'S VISIONARY.

With Zebra, see what happens when you can see it all.

Take advantage of a vantage point that lets you see into every aspect of your field operations. Increase productivity and growth. Watch customer satisfaction soar. And drive smarter business decisions.

See the vision at [**ZEBRA.com/visibility**](http://ZEBRA.com/visibility)

Editorial Mission Statement For [Field Technologies](#)

Covering front-end to back-end enterprise IT integration, *Field Technologies* shows growing organizations how to capture, generate, and retrieve data at all points of work and service. We educate IT decision makers about leading-edge technologies and applications that drive business performance — and revenue — by eliminating boundaries of time, distance, and scale.

July/August 2017

Cover Feature

80-Year-Old Company Revamps Field Operations

Replacing paper forms with a mobile solution saved Mission Linen Supply \$300,000 per year.



Editor's Notebook

Is Your Field Service Organization Stuck?, p. 4.

Special Report

Your Essential Guide To The ELD Mandate, p. 13.

Case Studies

Principal Standardizes Communications To Improve Customer Experience, p. 22.

Advanced Telematics Delivers \$2 Million In Annual Savings, p. 24.

Executive Outlooks

5 Data Points Every Fleet Manager Should Monitor, p. 26.

Maximizing The Productivity Of Today's Mobile Office, p. 28.

Analyst Outlook

The Importance Of Truly Knowing Your Customers, p. 30.

Is Your Field Service Organization Stuck?

Sarah Nicastro, Publisher/Editor In Chief,
sarah.nicastro@fieldtechinfo.com



I really enjoyed talking with Dave Pattison of Mission Linen Supply for this month's cover story. As you'll read, Mission Linen Supply was able to get out of a field service rut to truly modernize and transform their business. But as Dave and I were talking, I was thinking about how this process really takes some initiative and some discipline. It's easy to get stuck — when things are going all right, it's easy to make the decision to stick with the status quo. Especially when your employees have been operating a certain way for 20, 30, 40 years! But, as they say, what's easy usually isn't what's right.

Mission did the hard job of identifying and defining its need, researching and evaluating tools to fit that need, and working hard to implement technology and change the right way. If you think your field service organization might be stuck, I'd challenge you to consider the following steps.

Take An Objective View Of Your Operations

Sometimes, when you're in the throes of the day to day, it can be difficult to define where your operation is struggling or has room for improvement. Take a step back and try to view your processes and tools objectively. When is the last time you made any changes? What is the feedback your customers are providing? What changes might take your organization in a new, more modern direction? One piece of advice is to spend some time looking at what your peers are doing. Look for stories like the one in this issue on Mission Linen Supply, and think about whether or not some of the changes other companies are making could benefit your company too. This is particularly helpful if you can find examples of companies within your own industry, because it gives you perspective on the kind of service your competitors are providing to customers. Learn how today's leading organizations are modernizing and evolving their operations, and think about how those efforts would apply to your operation. Try to be open-minded — don't dismiss certain ideas at first glance without fully exploring the opportunity.

Get Some Help

Sometimes it is difficult to look at your business objectively, and then sometimes it is impossible. If you don't trust yourself to be able to do so, hire some outside help. Find a consultant that specializes in your industry or in technology use, and have them evaluate your operations and define areas of opportunity. This exercise doesn't mean you have to implement every suggestion they have, but it does give you the benefit of having an outside eye take a hard look at what you're doing and give you input that you quite frankly may miss yourself.

Automation Isn't Everything

Getting stuck in field service doesn't just happen when you can't evolve from pen and paper to leveraging technology to automate processes. It happens just as commonly for companies that get stuck from moving beyond automation. The efficiency and productivity gains you'll experience from moving from paper to mobile are very beneficial, but your evolution should not stop there. Once you've mastered automation, it's time to move on to really exploring how you can transform your business. Look for tools to help you gather data to make better decisions, ways to improve your customer experience, technologies to help train new employees, and so on. Don't get stuck at automation — continue to evaluate your operations regularly to define new areas of opportunity and growth.

Sarah Nicastro



Publisher/Editor In Chief
Sarah Nicastro
(814) 897-9000, Ext. 325
sarah.nicastro@fieldtechinfo.com

Managing Editor
Angel Clark
(814) 897-9000, Ext. 285
angel.clark@jamesonpublishing.com

Editorial Director
Dan Schell
(814) 897-9000, Ext. 284
dan.schell@jamesonpublishing.com

Production Manager
Lynn Netkovic
(814) 897-9000, Ext. 205
lynn.netkovic@jamesonpublishing.com

Circulation Director
Melinda Reed-Fadden
(814) 897-9000, Ext. 208
subscriptions@jamesonpublishing.com

Dir. Of Online Development
Art Glenn
art.glenn@jamesonpublishing.com

Corporate Office Address
Knowledge Park
5340 Fryling Road, Suite 300
Erie, PA 16510-4672

Contact Information
Corporate Office PH: (814) 897-9000
Sales Department FX: (814) 899-5587
Accounting FX: (814) 899-5587
email: info@jamesonpublishing.com
website: www.jamesonpublishing.com

Reprints, Eprints, and NXPprints
The YGS Group (800) 290-5460
FieldTechnologies@theYGSgroup.com
www.theYGSgroup.com

Manage Subscriptions
Subscription/Address Correction/Cancel
Web: <http://www.fieldtechnologiesonline.com> - magazine tab
Email: subscriptions@jamesonpublishing.com
(Reference 16-digit # on mailing label, title of pub, your name, and ZIP code)
Phone: (814) 897-9000, ext. 315

For A FREE Subscription:
Go To FieldTechnologiesOnline.com

Publications Agreement No. 40722524
c/o AIM, 7289 Torbram Road,
Mississauga, ON L4T 1G8



XPLORE[®]

**You can't put a price
on experience.**

**But the value it brings to
your business is priceless.**



Not every mobile technology buyer is going to be – or ever can be – a mobility expert. But every buyer can and should be equipped with enough “know-how” to select the right hardware, software and accessories for the job the first time.



Join Xplore and Group Mobile on September 21, 2017 at 12pm CT

Walk away with a step-by-step guide on how to properly evaluate mobile technologies within your unique environments, and for your many workflows in the field, vehicle and office. See how easy it can be to find a high performance field mobility solution, no matter your budget.

**Register for this webinar now.
www.xplorettech.com/buysmart**

**Sponsored by Intel[®]
Hosted by Field Technologies Online**



Intel and the Intel logo are trademarks of Intel Corporation or its subsidiaries in the U.S. and/or other countries.



Dave Pattison,
director of IT,
Mission Linen Supply

80-Year-Old Company Revamps Field Operations

by Sarah Nicastro

Mission Linen Supply was founded in 1930 as a one-man operation, and has since grown to a leading linen rental and uniform business with 43 locations across the United States and a fleet of 800 vehicles delivering goods to customers through 450 routes each day. The business has expanded beyond linens and uniforms to include the service and sale of apparel, mats, and janitorial products.

Eighty years later, the company is still family owned. Mission recently underwent a major transformation to bring its field operations up to date from a technology perspective. Introducing a new way of doing things can be difficult for any company, but

imagine doing so in a company with such history and employees that have become very accustomed to the status quo.

Mission uses a homegrown route accounting system that it developed internally nearly 40 years ago. When the route accounting solution was original-

Replacing paper forms with a mobile solution saved Mission Linen Supply \$300,000 per year.

ly developed, it was very cutting edge for the time and gained a lot of notoriety. So much so that Mission even sold the solution to other companies.

After the development of the route accounting system, technology at Mission remained status quo for quite a long time. Over time the route accounting

system was updated here and there, but a major overhaul took place in 2008 to bring it onto more modern architecture. At this point, a mobile solution became feasible (the system wouldn't

to get the ball rolling on a mobile initiative. "People get used to doing things a certain way, and change is difficult," says Dave Pattison, director of IT at Mission. "But we realized it was time



"Customer expectations have radically changed in recent years based on what's going on in the consumer world."

Dave Pattison, Mission Linen Supply

for us to stop talking about how we needed to modernize, and to start doing so."

Conducting Your ROI Analysis

Pattison worked with the CFO to conduct a thorough ROI analysis for the project. "We couldn't base a decision on such a large investment on us knowing we needed to do this or to do it because other companies in our industry were," says Pattison. "We needed to do the due diligence of identifying the costs and benefits of the project to make a sound decision."

One of the biggest cost factors examined in the ROI analysis was the paper forms Mission drivers were using. "Our drivers took a stack of triplicate forms on their trucks each day, and modifications were made with pen on those forms," Pattison adds. "We were spending \$300,000 per year on those paper forms alone, and that was a big factor in the ROI analysis."

Beyond the paper costs, there was also consideration for the data entry involved in inputting data collected by drivers during routes. Mission also factored in soft costs, such as the degree of data accuracy possible with paper-based processes and the perception of the operation as being antiquated and not up to date. "Our drivers are the face of Mission Linen — they are the primary touch point our customers have," explains Pattison. "If a driver is show-

have supported mobile prior to this overhaul), and Mission began to imagine some of the ways that mobile could transform its business.

For four years, Mission remained in the investigative phase. In 2012, a new CEO joined the company who recognized the need to modernize field operations and nudged the team at Mission

REGISTER TODAY!

1.888.482.6012 • fieldservice@wbresearch.com
www.fieldservicefall.com

QUALIFIED
SERVICE AND SUPPORT
EXECUTIVES

**GET 20%
OFF TODAY**

WITH DISCOUNT CODE:
FSF17FTO



FIELD SERVICE

September 25-27, 2017 • Omni Amelia Island Resort • Florida

*Advancing Service Together.
The Event for Leaders in Customer Care, Service, and Support*

"The conference was a HUGE success! It's impeccably organized in terms of the form and the content. I enjoyed a number of quite informative discussions with my colleagues across the industry. Overall, the conference was a very useful and meaningful spending of my time."

Vasiliy Krivtsov - Reliability and Statistical Analysis - Ford Motor Company



We're Taking You On A Journey...



Sponsors:



ing up in today's day and age with paper and a clipboard, I think customers begin to question if we are the kind of company they want to do business with. Customer expectations have radically changed in recent years based on what's going on in the consumer world."

With the ROI analysis complete, it was clear that investing in a mobile solution made sense for Mission Linens. The company's next step was to determine exactly what that solution would consist of. Because the route accounting system is homegrown, Mission initially believed that the mobile solution would need to be as well. However, the CEO advised against developing the

DecisionPoint had the skills and credibility to meet its needs, and was comfortable with its ability to successfully integrate with the homegrown route accounting solution. Furthermore, DecisionPoint had experience developing solutions for Android, which was necessary based on the device Mission selected.

Mission's device of choice was the Zebra ET1 (the Motorola ET1 at the time Mission was evaluating devices) touch screen tablet. "A lot of peers were testing out iPad-based solutions. We knew we wanted a device with more of a modern feel — tablet form factor, touch screen. But we also knew that, based on the environments our drivers



"We knew we wanted a device with more of a modern feel ... But we also knew that, based on the environments our drivers operate in, we needed rugged."

Dave Pattison, Mission Linen Supply

solution internally, having come from a technology background. He urged the team to utilize the skills and expertise of an external company that specialized in mobile instead of trying to take on the project internally.

Deciding Against The DIY Approach

"We knew that for the solution to appropriately interface with our route accounting system, we wouldn't be able to use an off-the-shelf application," says Pattison. "But we decided to work with a company that had mobile expertise instead of trying to build a solution ourselves."

Mission simultaneously began searching for the right mobile app partner, as well as the mobile device it felt would best fit the company's needs. From a software perspective, Mission chose to work with DecisionPoint Systems, a company that specializes in building, deploying, and supporting custom mobile solutions. Mission felt

operate in, we needed rugged," explains Pattison. Mission felt the ET1 fit those criteria, and the device runs Android, which meant the mobile solution needed to be built with that in mind.

It was 2013 when Mission decided on the requirements of its mobile solution, and the company just wrapped full deployment in February of this year. The timeline for the project was this long because there are many complexities to a revamp this major. Development and testing of the solution took nearly three years, and rollout spanned 2016 into 2017.

The Challenge Of Standardization

As Mission worked with DecisionPoint to begin developing the mobile solution, the true scope of the project became clear. "One of the biggest difficulties for us was coming up with the standard business rules that we needed to develop the mobile application," says Pattison. "In a sense,

each of our 43 locations operates as an individual business. They have general managers that run operations as their own businesses, and therefore there were no consistent processes or business rules among locations.”

This is where change management issues enter, because Mission was asking employees who had been operating independently for a very long time to change the way they work and begin complying with these standardized processes that, in many cases, were not how they did things. “When we began introducing the project to each location, we started hearing ‘That’s not how we do it,’ and emotions were high,” says Pattison.

Managing these emotions and helping employees see the value in the project were aspects of Mission’s project that just took time. Pattison explains that Mission strategically took a certain development approach to the project to minimize employee pushback as much as possible. “In the software development world, there’s the idea of a waterfall approach or an agile approach,” he explains. “Waterfall is where you sit down with everyone in a room, spec out the design for the

system, go back and develop, and then deploy. The problem is, you’re not getting feedback over time, so there are not a lot of inspection points on the direction things are taking.”

An Agile Approach To Software Development

Mission took an agile approach, meaning the company spent more time along the way introducing the solution to employees and getting feedback on iterations until it was confident in how the solution would perform before beginning deployment. “I think this was a very valuable approach,” says Pattison. “The feedback we got along the way helped guide the design and features of the solution so that the end result was something the employees knew would work for them. The downside of this approach is that when employees are seeing the early-on versions, they can sometimes panic.” Overall, Mission felt the value of obtaining feedback and therefore buy-in along the way was well worth the time invested.

Mission started this process by meeting regionally with general managers to discuss the objec-



HAVIS

New freedom of mobility

MOUNT YOUR COMPUTER REMOTELY

The latest mobile office solution from Havis features a new lightweight, high-resolution touch screen display and optional vehicle-specific dash mounts designed to improve productivity in a mobile office.

Learn more at havis.com/tsd



“We were prepared for far more change management issues and headaches than we ever actually experienced. I attribute that to the time we put in on the front end.”

Dave Pattison, Mission Linen Supply

tives of the project and to get them warmed up to the idea. Once the development of the mobile solution was underway, Mission developed a beta testing group to give feedback as the solution took shape. Part of the length of the development was also due to the custom work that needed to be done to successfully integrate the mobile solution with Mission’s homegrown route accounting system.

“We wanted to get operations team members invested and taking ownership of the project,” adds Pattison. “Our goal was for them to feel as though they could contribute a lot of input and provide a lot of feedback, so that this project didn’t feel like IT was just coming up with something we were forcing them to use.”

Taking Your Time With Deployment Eases Change Management Woes

In 2016, with the mobile application fully developed and tested, a phased approach to deployment began. Mission had to be careful to work around drivers’ routes as to not impact their overall productivity. Drivers were trained for two days in classroom-style training, and then they worked with the device and mobile application in testing mode until they went live the following week.

“One of the ways we could have sped deployment would have been to hire outside help to train at each location,” says Pattison. “For us, that wasn’t the right decision. We felt that having an internal person there provided continuity and helped to manage that fear of change.”

Pattison also feels the phased approach helped with adoption of the solution because, as roll-out was completed successfully at one location, employees would communicate with one another

and realize it went well, which helped to ease anxiety of the impending change.

“We were prepared for far more change management issues and headaches than we ever actually experienced,” says Pattison. “I attribute that to the time we put in on the front end, making sure the solution was well developed and well tested before we rolled out company wide. Our CEO, who has a lot of experience with technology deployments, even commented that he’d never seen one go so smooth.”

Drivers adapted surprisingly quickly to the ET1s versus paper. “We had drivers who had been using paper for more than 25 years that were fully efficient on the ET1 within a week,” notes Pattison. This is a testament to the usability of the device, but also in the way the software was developed. “It is simple — it mirrors the process they would have followed on paper, but more streamlined. The exercise of standardizing our processes and business rules was a painful one, but it paid off in the end.”

With the mobile solution fully deployed, Mission is saving the \$300,000 per year it previously spent on paper forms, and has also eliminated 30,000 hours per year of data entry from keying in driver notes taken on paper. The company no longer has to worry about accuracy since everything is automated, and customers now interface with drivers who are equipped with modern technology that enables a consistent, standardized experience.

Going forward, Mission intends to keep abreast of new technology advancements — although Pattison recognizes that is getting harder and harder to do. “The pace of change with technology today is incredibly fast. It becomes increasingly harder to keep up with, but that’s what companies need to do to remain competitive.” •



[A Special Report]

Field Technologies

Your Essential Guide To The ELD Mandate

From basic overview to solution selection criteria, this report is your go-to guide to ensuring compliance with the ELD mandate.

[Premier Sponsors]



If You're Frustrated By The ELD Mandate, Consider These 3 Points

Many of the companies I've spoken with that are impacted by the ELD (electronic logging device) mandate are frustrated by its existence. While that's understandable in the sense that most people don't enjoy being told what to do and when, you have to move past your frustration to look not only at the "why" behind the mandate but also at the opportunity it presents. If you are one of those people feeling frustrated, I urge you to consider these three points.

The Safety Benefits Of ELD Are Huge

One of the primary reasons that the U.S. Federal Motor Carrier Safety Administration (FMCSA) enacted the ELD mandate was to address a variety of safety concerns, which we'll discuss in more detail in this report. Think about what this means for your company and, even more importantly, your drivers. Ensuring safe operations benefits everyone: It protects your drivers, it helps your company to reduce liability and insurance costs, and it keeps the community at large on the roads safer, too. Yes, going through the exercise of obtaining an ELD solution and making changes to how your employees currently operate can seem daunting — but the increase in safety alone is worth the headache.

ELD Also Improves Efficiency

If you're like many organizations, the value of safety can be difficult to measure. While I assure you it is significant, let's shift our focus to a more tangible benefit that ELD will bring — an increase in efficiency. The elimination of paper forms and manual processes that the mandate brings about will have a significant impact on your operations. Yes, you have to come to grips with the investment and get over the hurdle of change, but the benefits of streamlining and automating these processes will be clear.

The Mandate Is An Opportunity

If you're wasting time being frustrated about this, try shifting your perspective to look at the opportunity

the ELD mandate brings. In all honesty, regardless of the mandate, eliminating your paper processes and embracing the digital age are changes you should be making anyway. Embracing what technology can do for your company is what leading organizations in 2017 are doing (or have been doing). The changes you'll make as part of compliance with the mandate provide benefits far beyond that compliance itself and will truly enable you to transform and modernize your operation. These technologies can be used beyond ELD compliance to deliver valuable data that can help your company's management make far better decisions, to deliver far better service to your customers, and even as a way to attract new talent to your organization.

I understand that change can be frustrating, especially when it's required. But I challenge you to put those emotions aside and embrace the fact that this mandate really is a great opportunity for your business. Once you shift your perspective to look at it that way, you'll start to see some of the ways that you can really take advantage of this change to improve your operations. The companies that look at this mandate beyond simply checking boxes to become compliant will be able to use these technologies in ways that can deliver significant business impact. If the mandate applies to you, you have to make these changes whether you decide to make the most of them or not — so I urge you to do just that.



Sarah Nicaastro

Sarah Nicaastro
publisher/editor in chief
Field Technologies
sarah.nicaastro@fieldtechninfo.com

The ELD Mandate, Simplified

As part of the Moving Ahead for Progress in the 21st Century (MAP-21) Act, Congress required adoption of the ELD (electronic logging device) mandate. The ELD final rule was enacted at the end of 2015 by the U.S. Federal Motor Carrier Safety Administration (FMCSA) with compliance required by Dec. 18, 2017. To simplify an understanding of the ELD mandate, let's look at three areas of information: the what, the why, and the who.

What Exactly Is The ELD Mandate?

The ELD mandate requires commercial drivers who are required to prepare hours-of-service (HOS) records of duty status (RODS) to do so using ELDs. An ELD is a technology that automatically records a driver's driving time and other HOS data for accurate record-keeping. An ELD monitors a vehicle's engine to capture data on whether the engine is running, when the vehicle is moving, miles driven, and duration of engine operation (engine hours). Essentially, an ELD takes all of the information a driver is currently required to keep on paper and does so automatically, electronically.

The mandate sets ELD performance and design standards and requires ELDs to be certified and registered with FMCSA. The mandate establishes what supporting documents drivers and carriers are required to keep, and it prohibits harassment of drivers based on ELD data or connected technology (such as fleet management).

Why Was The ELD Mandate Put In Place?

The primary driver of the ELD mandate is to increase safety of both drivers and the general public on the road. "The MAP-21 Act was put into effect to help the FMCSA reduce crashes, injuries, and fatalities involving large trucks and buses," explains Ryan Driscoll, marketing director at GPS Insight. "The ELD mandate's intent is to help the FMCSA hold businesses accountable for higher safety standards and to gain the ability to prevent high-risk drivers and vehicles from being on the road with the general public."

The FMCSA projects significant safety benefits from

the ELD mandate. "The FMCSA estimates that the ELD mandate will help avoid 1,844 crashes, 562 injuries, and save 26 lives annually," says Todd Ewing, director of product marketing at Fleetmatics. "This data is based on the improved compliance with HOS regulations that ELDs will provide."

One of the biggest risks of manual HOS logging is that when data isn't accurate, there is a greater likelihood of having fatigued drivers on the road. "The ELD mandate helps to better manage drivers' HOS and fatigue by more accurately measuring the amount of duty time drivers spend on public highways," says Sid Nair, senior director, transport and compliance at Teletrac Navman. There are stipulations on how many hours a driver can operate a vehicle in certain timeframes, and automating HOS logging helps to ensure that drivers don't exceed those limits, putting themselves and other people on the road at greater risk. With the lower risk comes less potential for accident and insurance costs.

Beyond the primary benefit of improving safety on the road, there is plenty more that companies stand to gain from ELDs. "There are some obvious benefits when a carrier installs and implements ELD. The administrative work around reporting HOS and managing RODS will be significantly decreased, because an ELD eliminates the manual process of completing forms and lowers the possibility of errors," says Jason Rudinoff, regulatory compliance analyst and safety specialist at ARI. "Carriers may see an increase in efficiency and productivity since their drivers will no longer need to spend time completing paper logs."

Consider looking beyond what it will take to just become compliant, and think about how this technology could have a greater impact. "Beyond ELD compliance, these technology platforms can facilitate route optimization, proof of delivery [POD], the ability to scan product on and off vehicles to better track inventory, and integrating the access of real-time vehicle diagnostic data," says Jim Dempsey, executive business development for mobility at Panasonic.

Let the ELD mandate compel you to discover all of

the ways you can bring your business into the digital age. “Companies that are new to deploying telematics and mobile devices can expect to benefit from digital transformation — the automation of traditionally paper-based processes,” says Ewing. “Paper forms such as trip sheets will be replaced with electronic forms. Manual processes such as driver status ‘check calls’ will be handled through automated updates regarding vehicle location and job status. Other automated workflow processes can be integrated with back-office or mobile applications. Companies can experience benefits such as reducing billing disputes associated with lengthy detention or delay times at shipper/receiver locations, improving driver relations stemming from better payroll visibility, and easier dispute resolution due to electronic records. Companies can also use the engine diagnostic reporting to improve uptime and reduce unscheduled repairs on their vehicles.”

These capabilities translate to real ROI. Based on assumptions stated by the FMCSA in its Regulatory Impact Analysis for ELDs, paperwork savings per driver per year are estimated to include:

- driver filing RODS: \$487
- driver submitting RODS: \$56
- clerk filing RODS: \$120
- elimination of paper driver log books: \$42.

Combined, that is \$705 per year in paperwork savings alone. If you’re wondering how the FMCSA came up with those numbers, the agency estimates that each truck driver fills out an average of 240 RODS per year, and an ELD is estimated to reduce the amount of time drivers spend logging their HOS by 4.5 minutes per RODS — or, 19 hours each year. They also note the time commercial drivers spend filing or forwarding their RODS to carriers, which the agency estimates takes five minutes and occurs 25 times per year — eliminating two more hours a year. In short, that’s a potential 20-plus hours of drive time wasted by filing and sending paper driver logs.

Whom Does The ELD Mandate Impact?

Generally speaking, the rule applies to most carriers and drivers who are required to maintain RODS data, which is the majority of commercial motor vehicles. The rule applies to commercial buses as well as trucks, and to Canada- and Mexico-domiciled drivers. “The current HOS requirements set by the FMCSA to help identify vehicles subject to the new

regulations include vehicles that weigh 10,001 pounds or more; buses used to transport nine or more passengers, including the driver, for compensation; buses used to transport 16 or more passengers, including the driver, not for compensation; and vehicles transporting hazardous materials requiring placards,” notes Driscoll. “The industries this typically covers include aggregate haulers, construction, energy, food distribution, freight/goods transportation, and passenger transportation.”

According to the FMCSA, the ELD mandate has some limited exceptions, including:

- drivers who operate under the short-haul exceptions may continue using timecards; they are not required to keep RODS and will not be required to use ELDs
- drivers who use paper RODS for not more than eight days out of every 30-day period
- drivers who conduct drive-away-tow-away operations, in which the vehicle being driven is the commodity being delivered
- drivers of vehicles manufactured before 2000.

“Some fleets will benefit from the grandfather extension where fleets will not have to begin using an ELD on Dec. 18, 2017 if they have installed a grandfathered AOBRD [automatic on-board recording device] prior to the implementation date,” explains Driscoll. “In addition, the FMCSA will allow these AOBRDs to be moved to new commercial vehicles, replacing the ones in which they were originally installed prior to Dec. 18, 2017. The FMCSA is clear that new AOBRDs cannot be purchased and installed after Dec. 18. Although these exceptions exist now, it is important to keep in mind they won’t exempt your fleet indefinitely.”

As referenced, the timeline the FMCSA has set for compliance states that all carriers and drivers subject to the ELD rule must use either an ELD or an AOBRD compliant with existing regulations by Dec. 18, 2017. AOBRDs may be used until Dec. 16, 2019 if the devices were put into use before Dec. 18, 2017. Starting Dec. 16, 2019, all carriers and drivers subject to the rule must use ELDs, and ELDs must have the capability of either telematics data transfer or local transfer.

Failure to comply with the ELD rule can lead to fines, penalties, and even operations being shut down.



Ryan Driscoll
marketing director,
GPS Insight



Todd Ewing
director of
product marketing,
Fleetmatics



Sid Nair
senior director,
transport and compliance,
Teletrac Navman



Jason Rudinoff
regulatory compliance
analyst & safety specialist,
ARI



Jim Dempsey
executive
business development,
Panasonic



Frankie Smith
VP of sales,
SureCall

Selecting The Right ELD Solution For Your Company

If the ELD mandate applies to you and you don't already have a solution that enables you to comply, the writing is on the wall that you need to find one — and fast. That said, as with many technologies today, there is a multitude of solutions on the market touting better features and functionalities. To help you create your company's ELD solution criteria and jump-start your selection process, we'll take a look at which capabilities you'll need.

Before we do that, though, let's talk about what you can expect your ELD solution to cost. The FMCSA commissioned a study to gauge the economic impact the mandate will have on fleets and, in doing so, found that on average, ELD costs approximately \$495 per year or about \$41.25 per month, per vehicle. This estimated cost takes into account the acquisition of the hardware and software, installation of the solution, and training for your drivers. Depending on the vendor you choose to obtain your technology, you may have options either to pay up front, finance over time, or even rent the devices.

The FMCSA believes the total annual cost of ELD adoption will be \$975 million, which includes all equipment for carriers and commercial truck inspectors, as well as inspector and driver training. That said, the net benefits of ELDs outweigh the costs, with expected paperwork savings of over \$1.6 billion annually, plus crash reduction costs of \$395 million. While the ELD mandate does require you to make an investment, the FMCSA has done its homework to ensure that the ROI is there. And, if you look at this as an opportunity to use the technology strategically — versus simply for compliance — you will reap more benefits.

Key ELD Features & Functionalities

To help your decision-making process, the FMCSA has developed a checklist of the key features and functionalities required by every ELD:

- Provides separate driver and manager accounts
- Synchronizes with the engine control module
- Automatically records driving time
- Retains data for the current 24-hour period
- Retains data for the previous seven days
- Prevents device tampering
- Requires driver to review unidentified driver records
- Allows driver to obtain ELD records on demand
- Supports electronic data transfer
- Displays required data for authorized safety officials on demand
- Requires driver annotations for edited records
- Provides ELD user manual

While this checklist serves as a good reference to ensure that your selected solution meets the FMCSA criteria, there are still many factors that will come into play as you evaluate ELD vendors. Many of those factors will be dependent upon your company's operations and goals for the solution, but there are a few categories that are universally applicable.

The first of those is ease of use. You want to find a solution that has an interface that is easy for the drivers to understand and use and that presents data in a way that is simple for management to use. It's likely that every solution on the market will tout "easy to use," so your best bet in finding one that you feel truly is easy to use is to test a few (at least). All too often, companies base technology decisions on cost alone and select the least expensive without really even doing their research. Let me caution you against doing so. That certainly doesn't mean you'll find that the most expensive solution is easiest to use — but it does mean you need to do your research. Ease of use is an important criterion, because it is tied directly to the likelihood of your drivers adopting the system. Pushback is normal and likely unavoidable to an extent, but choosing a solution with a clean user interface will help you speed adoption of the solution as you overcome those concerns — while a poorly designed solution will only compound your problems. "Your drivers are less likely to report their time correctly if it is difficult to update their status or provide compliance updates," adds Rudinoff.

"Similarly, if the user interface is difficult to use, the anticipated ease in the administrative burden may never materialize. Even worse, if it is hard to access and manage the data, you may run into compliance or reporting issues."

For many companies subject to the ELD mandate, durability is also a chief criterion. Oftentimes transportation environments can be rough — bumpy rides, dust, extreme temperatures — and if that's the case for your operation, you need to select a device that can withstand those operating conditions.

As you think through your ELD deployment, don't forget to consider a few peripheral points, for instance, the dock-

**\$1.6
billion
annually in
paperwork savings
expected by the
FMCSA**

ing/mounting of your ELD within the vehicle. “Having a safe, reliable mounting solution is critical,” says Dempsey. “The mounting solution needs to be able to withstand the same vibration and thermal standards that the devices do, while also preventing those devices from becoming projectiles in the event of an accident.”

If you are using a smartphone or tablet-based ELD, you also need to consider connectivity. “Many long haul truck and

he says. “This often limits a company’s ability to be innovative and flexible.” However, if you’re getting excited about how inexpensive and easy BYOD sounds, there are some important points to consider. One is that it is far easier in a BYOD environment for the drivers to risk non-compliance — whether through forgetting their devices, forgetting to plug them in, the batteries dying, and so on. Putting the control more in their hands means that there is more



fleet drivers travel extensive distances through areas where cellular signal is weak,” says Frankie Smith, VP of sales at SureCall. “In these instances, a cell signal booster can ensure data is able to be transferred to dispatch at all times.”

The BYOD Vs. In-Vehicle ELD Debate

Another major ELD decision is whether you want to take a BYOD or an in-vehicle device approach. A BYOD approach means that your drivers carry smartphones or tablets that communicate with their trucks via additional technology. They are personal devices that the employees bring with them to use for work, as well as personal purposes. With an in-vehicle solution, the devices are permanently mounted in the vehicles. While there are pros and cons to both options, it seems the vendors I interviewed mostly agree that an in-vehicle approach will make more sense for the majority of fleets impacted by the ELD mandate.

Let’s first discuss the BYOD option. The pros of BYOD include lower up-front costs, because employees are using their own devices. Training and change management may be easier to tackle in a BYOD environment because the drivers are used to, and comfortable with, their devices. “For a small fleet looking for a solution that is simple to use and easy to install, as well as economical, BYOD might be a good fit,” says Rudinoff.

As Ewing points out, there can also be more flexibility in a BYOD environment. “Many built-in solutions are more expensive and less configurable, with fewer app choices,”

opportunity for the solution to be improperly utilized or not utilized at all.

A second concern with BYOD is distraction. Drivers are not legally allowed to hold or interact with devices while driving, and if the devices they are carrying are their personal smartphones, drivers can be more tempted to do so.

Finally, there are issues with BYOD related to security and intended device use. How do you secure their personal devices? How do you ensure that they aren’t using the devices for personal purposes during working hours? What company data will be on the devices if they are lost or stolen? These are important points to think through and develop a plan for if you are considering BYOD. Further, some would say that the savings of device acquisition is offset over the long run. “Savings that are realized up front with BYOD often end up costing more in the long run,” says Dempsey. “Several studies have shown that while the procurement costs are removed from the equation, there is a larger expense in IT support that goes into managing BYOD devices.”

An in-vehicle approach alleviates many of these concerns. It’s a dedicated mobile console within the vehicles for drivers to do all of their work on. You don’t have to worry about forgotten devices or dying batteries. It’s far harder for drivers to risk non-compliance.

As you’re evaluating potential ELDs, you will want to consult with FMCSA’s ELD registry, which provides a list of self-certified devices that meet all currently published requirements (more on this later).

Beware These Three Common ELD Misconceptions

I've learned through conversations with our readers that there are some misconceptions about what the mandate means, the technology that will enable compliance, and how the change will impact operations. The vendors I interviewed corroborated and pointed out some additional misconceptions as well.

It's OK To Wait

The first misconception is that this isn't an urgent issue. December seems pretty far away, right? Wrong! The clock is ticking, and four months isn't long at all. Perhaps your ELD deployment is well underway; but if not, you should start working on it immediately. Holding off too long will force you to rush, and rushing will cause you a number of avoidable headaches — including selecting a less-than-optimal solution because you speed through evaluation, not to mention the pushback you'll get from the drivers, because you forced such a major change on them so quickly. Your ELD research and evaluation should be well underway to allow your company ample time for a successful deployment, including training and change management.

"There are four major reasons why procrastinating until Q4 is a bad idea. ELD inventory will be a supply chain nightmare, there will be a shortage of professional installers, ramping up and training your team doesn't happen overnight, and you may be forced to settle for just any system to be compliant [even if it isn't the best fit for your company's needs]," says Driscoll.

All ELDs Are Created Equal

Another common misconception is that all ELDs are created equal. Not only is this not true, but even if it were, not all are created to be equally beneficial for your company's specific needs. The only way to determine a best fit is to evaluate and even test multiple solutions.

As mentioned earlier, the FMCSA is trying to alleviate this issue by offering its registry of certified ELDs. While this registry provides criteria you can make sure your ELD provider has checked, you do need to keep in mind that certification is self-certification — there aren't yet any standardized ways to test compliance. Consequently, just because a vendor is self-certified doesn't mean that its solution has been validated to meet any certain criteria.

"Dozens of new providers have jumped into the market and 'self-certified' their solutions," cautions Ewing. You need to make sure you do your due diligence on any vendor you evaluate to ensure the solution is indeed compliant, to evaluate the vendor's stability and expertise, and to select a solution that is right for your company's needs.

Deployment Will Be Easy

If your drivers are already leveraging technology for their jobs, then perhaps ensuring compliance with the ELD mandate will be a simple change for you. However, if your organization is one currently using paper logs and you have drivers who are used to a manual way of conducting business, it's most likely a misconception to think this change will be easy. Selecting the right ELD is step one, but don't overlook the need to really think through how to manage this change to ensure adoption.

"There's a huge misconception to overcome in that many drivers think this technology is nothing more than 'Big Brother' and only being used to track their movements, habits, and activity," says Dempsey. "You need to be able to communicate to employees the reasons for the ELD rule and how your company will and won't be using the data. Having champions from your driver community is critical." The best first step to successfully manage the change is to formulate your plan for doing so. "It is important to communicate often with the individuals who will be affected and in as much detail as possible," says Rudinoff. "Plan ahead, so you can be clear on how the program will work, what the implications will be, what everyone's individual responsibilities will be, what training will be available, and how questions will be answered. And be open to feedback."

Beyond open, two-way communication, training will be imperative not only to foster adoption but also to ensure that compliance occurs. "Keep in mind how much training employees will require — both drivers and office staff — and create a continuous training schedule in collaboration with your ELD provider," says Nair. "You need to educate compliance managers, drivers, administrative personnel, and other ELD users on compliance requirements and processes, supporting document requirements and processes, ELD operation, proper editing of records, ELD data retention, understanding and preventing harassment and coercion, and ELD troubleshooting."

When creating your change management strategy, focus on the positive. "Electronic logging offers a welcome relief from a task that has historically been labor intensive," says Ewing. "ELDs minimize interruptions from the back office, maximize driver time, eliminate paper log books, improve safety, offer the opportunity to be recognized or rewarded for compliance and good driving, and streamline roadside checks." Your communication plan should be heavy on playing up these benefits for employees so that they can get excited about what this change will do for them.

Report Sponsors

Premier Sponsor:



Fleetmatics, a Verizon company, is a leading global provider of mobile workforce solutions for service-based businesses delivered as software-as-a-service (SaaS). Our fleet management solutions enable businesses to meet the challenges associated with managing local fleets, and improve the productivity of their mobile workforces, by extracting actionable business intelligence from real-time and historical vehicle and driver behavioral data. We provide fleet operators with visibility into vehicle location, fuel usage, speed and mileage, and other insights into their mobile workforce, enabling them to reduce operating and capital costs, as well as increase revenue. Learn more at www.fleetmatics.com.

Premier Sponsor:



For over 20 years, Panasonic has been engineering mobile devices for unforgiving environments where failure has real consequences. Thousands of organizations around the world rely on Panasonic Toughbook laptops, tablets and handhelds every day. Among them are companies involved in transportation and logistics who are preparing for the upcoming ELD mandate deadline. Panasonic's purpose-built devices boast low failures rates, industry leading service and support and low Total Cost of Ownership (TCO). Our reputation and service have earned us the distinction of being the longest-running rugged computer supplier for the U.S. military and public safety agencies. <http://business.panasonic.com/toughpad/us/transportation-tablet.html>



Founded in 2001, SureCall is the multi-patented, award-winning industry leader in cell phone signal boosters, combining high quality technology with innovative designs to create award-winning boosters that dramatically improve cell phone reception for personal cars and vehicle fleets, businesses and homes. Major players in the hospitality, automotive, technology and industrial fields, along with institutions like NASA and academic institutions such as Stanford and Duke, trust SureCall's FCC-approved boosters to make their signals go the distance. Visit www.SureCall.com for more information.

Premier Sponsor:



The GPS Insight Hours of Service Solution ensures FMCSA compliance and delivers superior safety and productivity for your fleet. The ELD solution bundles an Android tablet hardwired to a GPS tracking device. The tablet features an intuitive interface to ensure ease of use for all drivers. The management portal is web-based and accessible via PC, tablet, and smartphone. The ELD solution includes messaging, routing, and award-winning GPS tracking data. GPS Insight understands that this mandate is a paradigm shift and is offering customers hands-on training, augmented by on-demand videos to make the transition from paper logs to e-logs as seamless as possible. Visit www.gpsinsight.com to learn more.



ARI has revolutionized fleet management by leveraging the power of data and strategic closed-loop partnerships throughout the fleet supply chain life cycle. This technology has enabled organizations around the world to realize new levels of efficiency and value. Founded in 1948, ARI continuously uncovers new ways for companies to lower costs and improve total cost of ownership through technology, strategic partnerships and best practices. ARI manages more than 1.3 million vehicles in North America, the UK and Europe and, together with its strategic partners, 3 million vehicles worldwide. Learn more at <http://seenitcoming.com>.

TELETRAC NAVMAN



Teletrac Navman is a leading software-as-a-service (SaaS) provider leveraging location-based technology and services for managing mobile assets. With specialized solutions that deliver greater visibility into real-time insights and analytics, Teletrac Navman helps companies make better business decisions that enhance productivity and profitability. Its fleet and asset management technology uncovers information that would otherwise go unseen, helping customers reduce risk and confidently move their businesses forward with certainty. Headquartered in Glenview, IL, with additional offices around the globe, it tracks and manages more than 500,000 vehicles and assets for more than 40,000 companies around the world. For more information visit TeletracNavman.com.



Field Technologies
OPTIMIZE FIELD WORKERS, SERVICE & ASSETS

THE TECH ELEMENT

#MWCA17



SAN FRANCISCO 12-14 SEPT 2017

IN PARTNERSHIP WITH



Mobile is elemental.

It is an essential part of how we interact, communicate, work, and play.

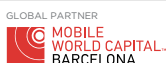
Experiences that were once limited by time and place are now instant and effortless.

Innovative technology is transforming the connected world, driving change and creating endless possibilities.

The Tech Element.

Contact us to learn more about participating in the event as an exhibitor, sponsor, partner or advertiser: sales@mwcamericas.com

WWW.MWCAMERICAS.COM



A conference program featuring C-level speakers and leading industry experts



We are expecting **1,000 exhibitors** showcasing cutting-edge mobile technologies, products and services



A regulatory and public policy program; partner events; free seminars



We are expecting **30,000 attendees**; offering you the opportunity to meet and network with key mobile industry influencers and top-tier media

Principal Standardizes Communications To Improve Customer Experience

Deploying a new CRM and field service software solution has increased efficiency, improved the customer experience, and streamlined compliance.

Principal Financial Group is a leading global financial investment company with \$619.7 billion in assets under management. The company's U.S. retirement and income solutions division has a team of more than 200 field service personnel that conduct in-person meetings in the field with advisors, plan sponsors, and participants, as well as another 100 employees who support both sales and service personnel for that division. The field team is supported by a team in the corporate offices — employees who service customers and

provide information, services, and insights to the field workers.

Until recently, the corporate and field arms of Principal worked out of different CRM platforms. While both parties interact with customers, there was no streamlined method of communication among them. "Working in two different CRMs, the only real way for the field and corporate teams to collaborate was to use

email or pick up the phone and talk to one another," explains Alan Corey, director of technology at Principal.

Improving The Customer Experience

Beyond the inefficiencies that constant phone calls presented, Principal wanted to avoid any negative customer impact that could occur as a result of these functions not easily sharing information. "We needed a collaboration tool, a 'one-stop-shop' for client information that all of our employees could access," says Lisa Fritz, operations director for field service at Principal. "We knew that enabling that collaboration would provide a better customer experience."

After Principal identified this need and made the decision to embark on this project, the company's first step was to determine what CRM to standardize on as there were many in use within the company, including a homegrown system. "We did our RFP process and landed on Salesforce," says Corey. "What spoke to us most about Salesforce was that the platform really focuses on connecting marketing with sales and service, across the

life cycle of our customer."

Principal began its Salesforce CRM deployment in 2016, going live with 1,000 employees on the corporate team in June of 2016 and following that with the deployment of Salesforce's Field Service Lightning solution to the field team to bring everyone onto the same platform.

There were a few key steps to Principal's rollout that contributed to its success. "One of the things we did at the very beginning that was instrumental in our success was to start with a beta testing group," says Fritz. "We had a group of about 25 beta testers that gave us valuable feedback on the solution so that when we got to our full-scale deployment, we really had a leg up in terms of the design and preparedness for implementation." The beta testers included representatives from different types of service team members, with a focus on employees who Principal felt would be early adopters of the solution. "We wanted employees who were open to technology, who we knew would use the solution and give us honest feedback," adds Fritz. "People who could champion it for us with others as we rolled it out."

Adoption Tip: Start With Critical Functionality

When Principal began its full-scale rollout, the company opted to focus on only core functionality. "We started by focusing on functionality that was critical to our employees to do their jobs, as opposed to the 'nice-to-have' features," explains Corey. As the core functionality of the Field Service Lightning solution is mastered, Principal can introduce new features and capabilities to the team. The benefit of this approach is that it allows employees to become familiar with the new technology, and appreciative of its ability to help them do their jobs without overwhelming them. Then once they are bought into the value of the solution, it becomes easier to expand on its use. "It was a challenge to narrow down what functionality to focus on first, but if we didn't focus, we would have never launched," adds Fritz.

Principal also focused heavily on its communications strategy around the deployment of Salesforce and Field Service Lightning. Leading up to the rollout, the company selected certain aspects of the solution and developed messaging campaigns for its employees to educate them about what was coming along. "We started months before our rollout foreshadowing what was coming," says Fritz. "It was almost like a teaser — letting employees know we were going to be changing the way



Principal Financial Group enabled collaboration among back office and field employees by standardizing communications on the Salesforce platform.

“We started by focusing on functionality that was critical to our employees to do their jobs, as opposed to the ‘nice-to-have’ features.”

Alan Corey, Principal Financial Group

we do business, that we were going to be making their jobs easier.” Corey and Fritz met monthly leading up to the deployment with the service leadership team for the field to give updates on the design of the solution and to make sure leadership was well informed and invested in the initial launch.

Once the deployment of the solution was underway, Corey and Fritz made themselves available every Friday for a period of about eight weeks where employees could call in with any question or concern they had. “At the beginning of the call we’d recap what was new with the project — status of deployment, and tweaks made to the solution, etc. — and then we’d take questions,” says Fritz. Not only did this give employees an open forum opportunity to discuss anything they’d like, but it also served as a valuable way for Corey and Fritz to give meaningful updates. “Anytime you’re implementing a new solution, there will be nuances that need fixed,” explains Corey. “During the week, we’d work to resolve any issues brought up through employee feedback — and having this Friday call gave us a great platform to inform all of the employees on how hard we were working to make adjustments and address concerns.”

When the calls began to decline in attendance and length, Principal knew it was time to stop having them and enable employees to provide feedback in another way instead. Now that the company was using a standardized platform, it was also possible to pull usage reports to see which employees were utilizing the system and which weren’t. Managers were able to follow up with any employees not using the system to see why and address those issues individually.

Standardized Platform Provides Valuable Consistency

With the solution in place, field workers have a dashboard in Field Service Lightning that shows all the pertinent information for their job — their clients, their advisor information, tasks, and calendar items. Information is shared among the field and corporate teams so phone calls back and forth are minimized. When field reps schedule a meeting, they have real-time visibility into the advisor and client’s information and communication history with the corporate team. “The solution tracks all pertinent information — the agenda

going into the meeting, expected attendees and actual attendees, whether it was in person or on the phone, and what was discussed. This is all memorialized and easy to access,” says Corey.

Scheduling of meetings is handled through Field Service Lightning, which gives Principal data to measure efficiency that the company didn’t have before. Before, meetings weren’t tracked consistently. Now, since they are all scheduled in Salesforce, the company is able to access metrics on the number of meetings each employee is setting and completing and weigh that with how it compares to company goals.

Insight into what happens during those meetings is recorded in Field Service Lightning, too, which is further data Principal can leverage. “As we get more and more data into the system, we’re able to have better visibility into how many meetings are taking place and what topics are being covered,” says Corey. “As we start to move forward, that data is going to equip our leaders to make better data-driven decisions that will help us maximize our relevancy to the client.”

From a customer perspective, the solution enables continuity of service. Before, a customer could have had a conversation with someone on the corporate team that the field rep wasn’t aware of — and therefore have to repeat information. Now, with the visibility between the two divisions, the customer is ensured a more streamlined experience. When issues come up and are documented, it prompts a conversation with the corporate team before a customer visit — so there is much better collaboration between the two teams. “Our plan sponsors are receiving more relevant interactions with our company as a result of the visibility and clarity across our entire team,” says Corey.

Currently, Principal is working on the next step in its project, which is an integration that provides compliance capabilities. “Compliance is a big issue in our industry because we are heavily regulated,” explains Corey. “The functionality we are adding to the solution now will help our reps more easily comply with regulations directly from the Field Service Lightning interface, and that is a benefit that they are really excited about because it makes their lives easier, allowing them to focus on providing a better experience to our customers.” ●

Advanced Telematics Delivers \$2 Million In Annual Savings

With the implementation of a new telematics solution and safety program, Red Hawk Fire & Security has reduced accidents by 68% and is saving \$2 million annually.

Red Hawk Fire & Security specializes in the design, installation, integration, monitoring, and on-site servicing of fire and security life safety solutions. The company provides fire and security services to more than 50,000 companies and institutions across the country. Red Hawk has more than 1,200 employees nationwide, including 950 field technicians.

The company recently updated its telematics solution in an effort to reduce costs and take advantage of more advanced telematics func-

tionality. Red Hawk's previous solution was a hardwired GPS solution, and the company was incurring significant costs by regularly removing and installing the equipment. "We were spending, on average, \$1,200 a month just on the removal and installation of the telematics equipment," says Blair Schober, fleet manager at Red Hawk. "Those are

just our direct costs — which don't factor in the losses of productivity and downtime of the vehicle being out of commission and the service tech not working while that work is being done."

Beyond the costs of maintaining the hardwired system, the previous solution provided limited data. Schober was seeking a solution that would provide behavior metrics as Red Hawk put its focus on improving driver safety. "I was noticing a higher frequency of more severe accidents," says Schober, "where there was more damage, more injuries, more liability, more lawsuits. We needed to make a change."

Gain Technology Buy-In With Cost Savings Focus

While safety was a paramount concern of his, Schober led into the initiative with the cost savings that would occur by deploying a "plug-and-play" solution versus the existing hardwired system. "The savings was significant and got everyone onboard with the project. From there, it was a trickle-down approach. I then shifted the focus to productivity, explaining how all the service managers, dispatchers, and operations managers could see where their employees are," explains Schober. "Then, once I knew they were seeing value in the system, I began coaching them up on the safety aspect of the initiative."

Red Hawk obtained its Geotab telematics solution from Assured Telematics and worked with ARI to develop a comprehensive safety policy. The safety policy is two-pronged. First, Red Hawk proactively requires drivers to complete six mandatory safety modules. The modules are chosen by their fleet manager and include topics such as understanding the fleet policy and how to avoid crashes. How the drivers perform is reflected in their file, and those who do exceptionally well are given incentives.

The second aspect of the safety policy focuses on correcting poor driver behavior, ideally before an accident ever occurs. Using ARI's technology, Red Hawk monitors driver activity and behaviors and is able to identify a driver exhibiting bad behaviors before an incident occurs. As these behaviors are identified, the driver is assigned training modules to complete geared toward correcting the bad behavior they are exhibiting. Once the training is completed, their fleet manager can follow up to ensure the behavior has been resolved.

The ARI system provides data to Red Hawk that helps to create a culture of awareness among its drivers. "It essentially ranks the drivers, based on risk behaviors and skill assessment," says



After noticing a higher frequency of severe accidents, Red Hawk Fire & Security put a major focus on driver safety.

Schober. "Scores are reviewed on a monthly basis, and drivers are provided trainings as needed to keep them scoring well."

Overcome Big Brother With An Emphasis On Safety

Deployment of the new system began in 2014 and was completed in 2015. As with many telematics deployments, Red Hawk experienced some growing pains with change management. "Focusing on safety is a great way to counteract that Big Brother perception," says Schober. "You're making an investment in their safety and well-being and also to curtail liability." While the solution does provide tracking benefits that have helped the company deter unauthorized vehicle use and unproductive downtime, Schober explains that focusing the communication on the safety aspect helped minimize Big Brother pushback.

The results of Red Hawk's new telematics solution and focus on safety are significant. Schober reports that since 2014, Red Hawk has saved \$2 million in liability costs annually. The company has reduced claims spending by \$218,119 and has seen a drop in the number of accidents of

68 percent. "Our company culture has changed significantly since beginning this initiative," says Schober. "The focus has expanded beyond just our drivers to a push to management company-wide to focus more on safety."

The Future Of Telematics

Going forward, Red Hawk has plans to continue to derive value from its telematics investment. The company plans to expand the breadth of its safety program with a focus on harsh braking and the installation of dash-mounted cameras in the vehicles. "When a red flag is presented in the telematics solution, you can pull up the camera footage to determine exactly what happened," says Schober. This is beneficial both for the use of reviewing and addressing driver behaviors and for having evidence when incidents occur. "If someone contacts us and says, 'Hey, your driver sideswiped us,' we can review the footage to determine what happened," explains Schober. "The dash cameras also bring huge potential for coaching up drivers – really showing them what behaviors are good versus bad, illustrating what is considered a harsh brake, and so on." •

Trimble **PULSE**[™]
Connected Field Service



CONNECT YOUR PEOPLE, PLACES & THINGS

Trimble PULSE[™] allows you to manage, schedule, mobilize and monitor your entire service operation, across people, places and things, on a single platform.

Connecting your customers, operations, mobile workforce and intelligence enables you to balance customer service with operational efficiency and ensure your service delivery is profitable.

Find out more:

www.trimblepulse.com
Call: 877 728 7623

DOWNLOAD OUR FIELD SERVICE INSIGHT REPORT NOW: trimblepulse.com/insight2016

TRANSFORMING THE WAY THE WORLD WORKS



5 Data Points Every Fleet Manager Should Monitor

GPS fleet tracking solutions provide critical information that can help improve fleet utilization, reduce costs, coach drivers, and improve safety.

Affordable, easy-to-use technology is helping businesses of all sizes use data to optimize their operations. Relying on drivers and vehicles to build a healthy bottom line means you need to know certain fleet-related metrics and benchmarks that can help you measure success. For companies with vehicles and mobile workers in the field, GPS fleet tracking solutions provide critical information that can help you spot opportunities to improve fleet utilization, reduce costs, coach drivers, and improve safety.

But what metrics should you measure? Here are five data points to start with:

#1: Stops Made Per Day

Let's talk productivity. Do you know the number of stops your drivers or crew make each day? Having a good handle on where your drivers are, the routes they take to get to jobs, and how long they spend on a job site will help you see if you have room to schedule another job per driver, per day — talk about a boost to the bottom line! To see if you can fit in additional jobs, make sure your drivers are taking optimal routes to and from their jobs sites, lunch hours and breaks aren't being over-extended,

and trucks are stocked with the right inventory to cover the day's work.

#2: Fuel Usage And Efficiency

According to 2015 operating cost statistics from *Automotive Fleet* magazine, fuel represents 60 percent of a fleet's total operating costs. That's a lot of money — and there are a lot of factors that affect your fleet's fuel consumption. Speeding, harsh driving habits, idling, and poor route planning are the biggest culprits for wasted fuel. Tracking fuel usage and efficiency on each of your vehicles helps you to know what you're spending on fuel and will

help you identify how to cut down on unnecessary fuel costs.

#3: Harsh Driving Behavior

Stepping on the gas. Taking corners like a race car driver. Slamming on the brakes. These are all indicators of dangerous driving. Add in speeding, and your fleet has increased likelihood for accidents that could cost you a lot of money. The average cost of an accident for an employer is around \$16,500 per incident, according to the NHTSA (National Highway Traffic Safety Administration), but the true cost of such an incident goes beyond the monetary impact, including damage to your reputation. Understanding how your vehicles are being treated and how your drivers are operating behind the wheel will help you coach your drivers and curb dangerous driving habits before they have a negative impact on your business and bottom line.

#4: Maintenance Cost Per Vehicle

Keeping your vehicles on the road is a priority. When those vehicles head to the garage for any kind of lengthy service or repair, you run the risk of losing productivity and revenue. Vehicles that skip scheduled service appointments (think regular oil changes and tire rotations) often have a higher rate of breakdowns. Automatic service reminders can help you manage time (and money) when it comes to keeping your vehicles healthy.

#5: Payroll

Manually calculating payroll using paper timecards could be costing you more than you think. And when it comes to billing your customers, knowing the exact amount of time a technician spent on the job is critical so you don't overcharge. Automating timecards can help eliminate time sheet fraud and help to accurately calculate payroll and overtime pay so you're paying for only the hours worked — nothing more, nothing less.

Armed with these data points, which can be easily accessed through advanced GPS fleet tracking systems, managers can have the insight — and foresight — to make smart decisions that can help grow revenue and protect their bottom lines. ●

todd ewing



Todd Ewing
director of
product management,
Fleetmatics
www.fleetmatics.com

FULL VISIBILITY.

- ✓ VEHICLES
- ✓ DRIVERS
- ✓ JOBS



Schedule your live demo of
Fleetmatics REVEAL™ GPS
fleet tracking software today.

Call us at 866.844.2235 or
visit www.fleetmatics.com

 **Fleetmatics®**
A Verizon Company



Maximizing The Productivity Of Today's Mobile Office

Key advice for preparing the "office" of today's deskless workers

By 2020, the number of U.S. mobile workers is expected to grow to 105.4 million or 72.3 percent of the total U.S. workforce. Worldwide, 1.87 billion people or 42.5 percent of the global workforce will be mobile by 2022.

Today's motor vehicle is no longer for transportation only — it's a highly advanced mobile office capable of integrating voice, data, video, and operating systems. As technologies evolve, vehicles are becoming more complex due to numerous options that fleets have.

With many of your employees doing the majority of their work on the road or in the field, you are now tasked with ensuring your workers have adequate tools to do their jobs effectively in their mobile offices. How do you make these mobile offices as safe, reliable, and produc-

tive for them as you can? Here are some tips to create a total mobility solution.

Defining Your Workforce's Mobile Office Needs

Mobile employees can benefit from well-installed, customized mobile solutions, but it takes thoughtful planning and organization to achieve a solution that will solve specific business problems and work function requirements. Additionally,

employee satisfaction and their integrated mobile experience should be considered. For instance, field workers may require tablets mounted in their vehicles with the ability to easily undock for portable use. In a public safety scenario, an officer may currently use a laptop in the cabin but is transitioning to an external touch screen up front with a trunk-mounted laptop to allow for more space. To start your planning, determine the following:

Vehicle Type — What vehicle make, model, and year do you currently use? What are you looking to transition to? For example, your fleet may currently drive vans but would benefit from trucks. Or perhaps you are buying new sedans or leasing sport utility vehicles. Consider what vehicle fits your workforce's needs best.

Equipment — What equipment do you currently have, and can it be transferred to a new vehicle? Learn about what equipment is compatible with the vehicle's

make and model — whether tablets, keyboards, printers, radios, etc. Never assume the equipment you have will transition to another vehicle. Once you determine what equipment you have, you need to identify what new equipment will benefit the mobile office — including software, hardware, docking and mounting, and accessories such as screen blanking.

Mobile Worker — Keep in mind how your selections will impact the end user's comfort, safety, and productivity on a daily basis. A mobile office designed without ergonomic considerations can result in decreased productivity and put workers at risk of injuries, such as chronic neck and shoulder pain. The best way to accommodate end users is to incorporate their input early on in planning.

Once you establish the extent of your fleet's equipment needs, you can identify the best way to manage the installation process. Vehicle installations directly impact job applications, so keep in mind that economy does not equal efficiency. There are several installation varieties, including turn-key, multiple vendor, agency fleet shop, full upfit, OEM package, and nationwide mobile fleet installation companies. Making decisions based on occupant safety and overall value rather than solely on cost will help you develop a total mobility solution that fits your needs and budget. A well-planned and organized technology and equipment installation can enhance driver comfort and productivity, improve safety, and increase efficiency and cost-effectiveness.

An installation partner with the right expertise, industry partnerships, and project management capabilities can be an invaluable resource to enlist in designing and deploying a mobile office solution that increases your fleet's overall productivity. Such a partner can help determine mobile needs and requirements, identify the right equipment to meet specifications, and then install and deliver that system as promised at a reasonable, competitive price. The more educated you are on installation considerations, the better equipped you are to clearly communicate your project requirements and strategic goals.

Fleet technology implementation can seem overwhelming, but you can remove the complexity by soliciting advice and referrals from experienced fleet peers, installation partners, vendors, or equipment manufacturers. Achieving a successful technology deployment hinges on the communication atmosphere, cooperation, and trust of everyone involved in the project. ●

keith steidle



Keith Steidle
director of business
development & mktg,
Havis
www.havis.com

HAVIS

Productivity in motion

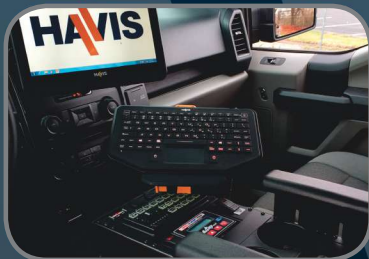
Touch Screen
Display



Tablet &
Laptop Docking



Vehicle Specific
Consoles



Universal
Cradles



Computer
Screen Blanking



Integrated
Control System



Trunk Mounting
Solutions



Mounting &
Motion Devices



www.havis.com

The Importance Of Truly Knowing Your Customers

The first step in providing excellent service to customers is understanding their expectations.

The field technician's role is extremely varied, and no one job description is likely to be able to describe or define everything he or she does. In some cases, a field technician is called on simply to be the repair person — they arrive on-site, fix the equipment, and leave without causing any undue disruption. However, in other cases, they may serve as anything from a consultant (being asked to provide advice on how to most efficiently use the equipment), to a trainer (being asked to teach the customer how to operate some of the equipment's more advanced features), to a sales person (being asked to suggest what new types of equipment should be acquired to replace the existing model).

If the question is "Which one of these roles is the field technician supposed to play when interacting with customers?" the answer is — simply stated — "all of them!" Customers will, at one time or another, expect their field technicians to serve in all of these roles.

Field Technicians Today Wear Many Hats

Basically, field technicians need to serve in whatever role their customers expect

them to serve, as they are often the customers' only true connection to the company after the point of initial purchase. The irony is that, if all the technician does is repair the customer's equipment whenever it fails, they will typically be perceived as "not doing their job." However, by also becoming their customers' systems and equipment consultant, advisor, and (pre-)sales person — if only on a casual, or as-needed basis — they will certainly place themselves in a stronger position to become the most important individual to the customer with respect to any and all of their systems and equipment service and support needs.

It doesn't take customers long to get to know who their field technicians are. In fact, within just a few on-site service calls, they probably will get to know very well how well they communicate with customers, how quickly they react to what they would define as

"emergency" or "urgent" situations, how quickly they tend to arrive on-site, and how much attention they pay to the details once they get there.

Can your organization say the same for each of its customers? If the answer is "no," you may find yourself in a situation where your customers are "managing" their relationships with you better than you are with respect to managing yours with them. If this is the case, you may ultimately find yourself at a relative disadvantage in dealing with your customers in the future — especially if they believe that you don't really know who they are (i.e., what makes them "tick," what "ticks" them off, etc.).

So, what do you need to know about your customers? It once again comes down to having a basic understanding of their specific and unique needs, requirements, preferences, and expectations for the types of service and support you provide, as well as the way they react when their equipment goes down. And, how can you best get to know your customers on this basis? By listening, observing, and thinking before you speak!

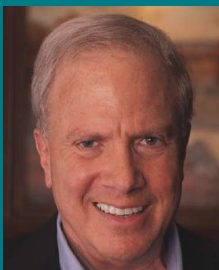
However, while understanding the customer's need for basic systems and equipment service and support is relatively simple, understanding their need for "value-added" service and support may be a bit more complicated, as their interpretations of exactly what "value-added" means may vary greatly.

From the customer's perspective, "value-added" may mean anything from performing additional maintenance service on peripherals, servicing additional equipment while the service technician is already on-site, installing new software, installing another piece of equipment they had recently purchased, walking them through an unrelated problem that they might be facing, and anything else in between.

While these may all represent realistic "needs" from the customer's perspective, it will ultimately be up to company policy (and the service technician's daily schedule) to determine what really represents acceptable "value-added" service and support while the service technician is already at the customer site — and what will require an additional or separate (and sometimes billable) work order.

The bottom line is that you really do need to know your customers, because they probably already have you (and your service technicians) figured out! •

bill pollock



Bill Pollock
president &
principal consulting analyst,
Strategies For Growth
www.pollockonservice.com

A woman wearing a blue knit beanie with sunglasses on top, a light blue and white outdoor jacket with a "CASCHER" logo, and dark pants is kneeling on a rocky shore. She is holding a ruggedized tablet computer with both hands, looking at the screen which displays a map or data. In the background, there is a large, snow-dusted mountain peak and a body of water.

Intelligently tough.

Get best-in-class reliability and productivity in the harsh conditions you face every day with Dell's Latitude Rugged portfolio. With the most secure and manageable rugged computers available, you can focus on your work.

Learn More at Dell.com/rugged





DO YOURSELF A SERVICE MAKE AFTERMARKET SERVICE PROFITABLE

Companies utilizing servitization are reporting enhanced revenue growth, increases in sustainable business growth of 5 to 10 percent and predictable income streams. IFS offers service organizations the most complete software offering on the market to make aftermarket service profitable.



Visit [IFSworld.com](https://www.ifs-world.com)