

## Dynamic Data Unlocking fleet efficiency with advanced telematics



### Telematics: Enabling Fleet Optimisation

Telematics is the collection and long-distance transmission of operating data. Sensors in a connected vehicle collect data, sending it instantly and continuously to the fleet management systems.

These systems can spot developing problems, or opportunities for efficiency, in real-time. But they can also perform ongoing and long-range analysis to enable fleet optimisation.

As fleet businesses plan their recovery from the 2020 COVID-19 crisis, 65% of fleet managers believe cost savings will be an important opportunity for their business<sup>1</sup>. A data-driven approach to fleet management, using Telematics, can help maximise convenience, control, and cost savings.

#### The state of telematics today

Telematics is already helping fleet managers today. According to a recent Frost & Sullivan analysis, 31% of transportation and logistics fleet owners are currently utilising telematics solutions in more than 75% of their fleets<sup>2</sup>.

Telematics technology can enable managers to unlock significant improvements in their fleet operations. Features such as fuel reports, route optimisation, and driver analytics, help fleet managers to identify opportunities to greatly improve overall efficiency of the fleet. When implemented correctly, a fleet could expect to achieve up to 20% improvement in fuel economy and up to 15% reduction in carbon footprint<sup>3</sup>.

Three other ways that telematics technology can contribute to fleet efficiency include:

- Predictive maintenance: with the right telematics solution, fleet managers can spot problems before they emerge and sometimes even fix them remotely while the vehicle is still moving, helping reduce the costs of unplanned maintenance and vehicle downtime.
- Fraud prevention: by monitoring vehicle usage, payment transactions and unusual fuel card activity via detailed reports, operators can detect and reduce mileage fraud, helping avoid unnecessary costs.
- Improved driver safety: with advanced telematics, fleet managers have the information they need to support drivers, by managing working hours, improving scheduling, and monitoring driving behaviours, helping keep them safe and efficient.

Nexus Communications, 'Covid-19: The worldwide impact on Fleet and Mobility' survey results, April 2020
Frost & Sullivan, Adoption of telematics in commercial vehicles in Europe and North America to witness robust growth, September 2019
Gartner, Market Guide for Transportation Mobility Technology, 2018

# Creating efficiencies with telematics, today and tomorrow

#### By Giorgio Delpiano, VP Shell Fleet Solutions

There are powerful forces shaping the commercial road transport industry: rapid advances in technology, the emergence of new fuels, changing consumer habits, and evolving legislation, to name but a few. Add to this the economic upheaval following the 2020 COVID-19 crisis and it is not hard to see that pressure on fleet managers has intensified. But crisis can bring opportunities to do things differently and accelerate change.

As they consider strategies to ride out the storm and stay competitive, it has never been more important to seize opportunities for efficiency improvements and cost reduction, and to hold onto their best drivers. This is where fleet management technologies, such as telematics, can help: for example by reducing costs and optimising vehicle usage.

#### Embracing the power of data

By 2025, it is predicted that one in three light commercial vehicles and half the trucks on the road will be using telematics<sup>4</sup>. Forward-looking fleet managers who are keen to extend vehicle life and drive further efficiencies, are already realising the potential benefits.

Equipped with telematics data, fleet managers can find opportunities to save costs, avoid unscheduled downtime and boost productivity.

Telematics technology can help mangers identify trends in their business and provide information to help them navigate uncertain economic times. For example, detailed trip reports can help optimise vehicle utilisation and driver scheduling, while integrating back office systems with telematics can help improve productivity and efficiency.

#### Supporting talent retention

Worldwide, a key challenge facing fleet managers is a shortage of drivers. The European road transport sector is expected to face a 13% increase in driver shortage in 2020<sup>5</sup>. In India, about 28% of the country's

7. Boston Consulting Group, The Future of Commercial Vehicles, October 2019

approximately 8.5 million trucks are sitting idle due to a lack of drivers<sup>6</sup>.

Against this backdrop, implementing working conditions that will help attract and retain drivers makes good business sense. Telematics data can enable managers to more effectively manage working hours, more efficiently plan schedules and routes, and take a proactive approach to fleet safety by addressing any unsafe driving behaviours. Additional features such as integration with proof-of-delivery, or arrival notifications, can also make a driver's working life easier by saving time and admin.

#### Unlocking an electric future

Estimates suggest that by 2030, up to 30% of commercial vehicle sales will be new-energy vehicles<sup>7</sup>, propelled largely by tightening government legislation on vehicle emissions and a desire among fleet bosses to improve their sustainability record.

As fleet managers look to transition to electric vehicles (EVs), telematics can help. For example, trip data can be used to assess the required range of EVs to suit the fleet's needs, enabling managers to make informed decisions and avoid 'range anxiety'. Fuel consumption data can help calculate the potential savings and emissions reduction that could be achieved from switching to EVs. And once the decision has been made and EVs introduced to the fleet, managers can feel reassured that the real-time telematics data can help them predict exactly where and when a driver should recharge, to help avoid unnecessary detours.

#### A smarter way forward

Now, at a time of intense competition, economic uncertainty, and rapid change, it is more important than ever for fleet companies to remain competitive. For fleet managers, this means finding opportunities to optimise operations. Embracing fleet management technologies, such as telematics, can prove valuable in boosting efficiency today, and making informed decisions about tomorrow.

<sup>4.</sup> Ptolemus Consulting Group, Connected Fleet Services Global Study, 2018 Edition

<sup>5.</sup> International Road Transport Union (IRU) report 2020

<sup>6.</sup> International Road Transport Union (IRU), 'Driver shortage for trucking industry – an India perspective', October 2018



### Get onboard with telematics, now

Telematics delivers significant advantages in efficiency, safety and intelligence today. It will also be crucial to fleet efficiency over the coming years, so any investment in telematics now helps build a platform for growth and efficiency in the future.

By 2025, the number of telematics units installed globally across commercial fleets is expected to approach 100 million units<sup>8</sup>.

Many innovative manufacturers are already incorporating advanced telematics in new models. US truck manufacturer Kenworth operates a "TruckTech+" system<sup>9</sup>, extended to its medium-duty trucks in 2019, which uses telematics to provide fleet managers with real-time engine health information, enabling faster diagnostics and helping reduce unplanned vehicle downtime.

The benefits for insurance and driver safety are also widely acknowledged. In India, the Insurance Regulatory and Development Authority (IRDAI)<sup>10</sup> has endorsed telematics as a way for drivers to save money while staying safe and becoming more aware of their surroundings.

As technology advances, there are more opportunities to integrate telematics with other fleet management platforms, which can add even more value. For instance, integrating your telematics system with your HR, billing, payroll or engine maintenance apps can deliver greater efficiency, more accurate performance-related pay and other benefits. Or, linking telematics and proof of delivery data can help urban delivery fleets improve customer satisfaction<sup>4</sup>.

Forward-thinking fleet managers who embrace telematics now are setting themselves, their fleets and their companies up for success in a highly competitive data-driven future.

Ptolemus Consulting Group, Connected Fleet Services Global Study, 2018 Edition
www.kenworth.com/trucks/technologies/kenworth-connected-truck
www.irda.gov.in 'Discussion Paper on Telematics'

### THE PLUGGED-IN DRIVER OF TOMORROW

With more data at their fingertips than the Apollo astronauts, tomorrow's driver will be in a different world. Technology and data will unlock improved efficiency, productivity and safety.

### Trucks will learn to love company

Using GPS and telematics enabled 'platooning', trucks will travel in each other's slipstreams, reducing fuel consumption and emissions by up to 16%.<sup>2</sup>

### Drivers can cover the same ground in 30 minutes less

Drivers informed by telematics and Al-powered route software will be able to cover the same daily miles as today, in around 30 minutes less time.<sup>1</sup>

#### There'll be less overtime

Customers will know

your drivers by sight

Integrating systems such as CRMs with

fleet telematics will make it easy to tell

them before they arrive.

customers where their driver is, when they

will arrive and even send them a photo of

Smart mapping, freight brokering, and other data technologies will help drivers save up to 30 minutes a day and reduce the need for overtime by as much as 15%.<sup>1</sup>

#### Computers will help – drivers drive smarter

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With sensors and Al capturing driver styles, fleet managers can help their drivers learn how to be safer and more efficient, cutting fuel costs by up to 35%.<sup>1</sup>

### Get there faster without checking a map

Real-time mapping will help European drivers save up to 1.5 million gallons of fuel every year by being faster and more efficient.<sup>1</sup>

487

435

**Drivers will use less fuel** Al assistants and telematics will help you

FUEL DISTANCE +3.2550

coach drivers to be more fuel efficient, reducing petrol and diesel costs by up to 35%.<sup>1</sup>

 "Automative Data Monetization to Reach \$33 Billion in Opportunities for OEMs by 2025, Finds Frost & Sullivan". 22 February 2018, Frost & Sullivan.
"What is truck platooning?" 2017, European Automobile Manufacturers Association

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### Tackling challenges of the data transformation

Along with opportunities, the transformation of the fleet into a data-driven one can also raise challenges for fleet managers. These range from the capital investment involved in acquiring new, telematics ready vehicles, to ensuring GDPR compliance, to managing resistance to change, particularly among drivers who may worry that the new technology is a form of surveillance. Three tips to overcome potential obstacles:

- Showing drivers how telematics can improve their day, for example by avoiding time stuck in traffic, enabling better scheduling and even reducing their personal fuel bills by encouraging more efficient driving style, may help secure buy-in.
- Understanding how different data collection and analytics systems can integrate with each other to generate additional value. While fleet managers are unlikely to perform the integration themselves, they must be able to instruct and oversee those who do and be ready to be judged on the business outcomes.
- Staying abreast of new regulations is essential, particularly as serious GDPR infringements can result in penalties of up to €20 million or 4% of worldwide annual turnover<sup>11</sup>. Ensuring that both their own company and their telematics provider are GDPR compliant can help fleet managers avoid falling foul of the law.

11. GDPR.eu/fines

### TELEMATICS AND FLEET ELECTRIFICATION

Introducing electric vehicles (EVs) offers benefits in efficiency and sustainability. But it can also be challenging. Fleet managers require a continuously updated overview of each vehicle's state-of-charge (SOC) and need to ensure that drivers aren't forced to introduce detours and inefficiencies into route planning.

Fortunately, EV-compatible telematics systems, like Shell Telematics, don't just provide an answer to these challenges, they have the potential to greatly enhance the benefits of electrification.

Onboard diagnostics keep managers continuously informed of the health of electric and mechanical systems. Telematics provides instant and continuously updated information on factors such as charge remaining, planned route, and vehicle location, helping fleet managers predict exactly where and when a driver should recharge for maximum efficiency.



### What skills will a future fleet manager need?

With such a rapid pace of change and the prospect of a wide-ranging transformation, it's easy to fall into the trap of thinking that there's nothing today's fleet managers can do to prepare themselves. This is not the case.

Here are the top five skills fleet managers can start building today, to prepare themselves for tomorrow:

#### 1. Data thinking

Most fleet managers are already some way along this path, accustomed as they are to making decisions based on stats about vehicle usage, route efficiency and so on. Now's the time to start looking at the kind of data common fleet management solutions can yield and working out how you can use it to make your fleet smarter.

#### 2. Software integration

No one's suggesting you prepare yourself to be a programmer or network engineer, rather you should prepare yourself to be the boss of programmers and network engineers. You need to understand what these people do, how it relates to the new world of fleet management solutions, how to brief them and how to judge their performance.

#### 3. Data-informed driver management

Many drivers are understandably nervous about a technology they regard as 'big brother'. A large part of the future fleet manager's job will be to help drivers see the benefits of the new technology and then to manage drivers in such a way that those benefits are fully realised but are not alienating.

#### 4. An understanding of data privacy

Many of the systems integrated into tomorrow's, and even today's, vehicles will generate data which reveals potentially confidential things about the driver — his or her location at any given time, his or her performance on the job, and so on. This data is covered by data protection law and its loss or unauthorised disclosure could lead to heavy penalties for the company. It's imperative that fleet managers understand data protection law.

#### **5. Performance optimisation**

Industries that have already been digitised are used to such concepts as split-testing, blind trials and other methods of developing theories for optimisation and then testing those theories in a rigorous and reliable manner. With vehicles traveling thousands of miles a week, fleet managers have what they need to test different fuels, lubricants, driving techniques and other variables to continuously optimise their fleet.



## Find the right Shell Telematics package for you

Talk to our team about how our solution can help simplify life for you and your drivers

www.shell.co.uk/telematics

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