

'THE INTERNET OF THINGS'

IN THE COMMERCIAL VEHICLE SECTOR

EXPLAINED

DEFINITION

THE INTERNET OF THINGS DESCRIBES A WORLD IN WHICH EVERYDAY OBJECTS ARE CONNECTED TO A NETWORK SO THAT DATA CAN BE SHARED.



In the Commercial Vehicle sector the **Internet of Things** is enabling innovations like self-driving cars, "smart" fleet management, and intelligent transportation infrastructure.

Source: Government Office for Science: 'The Internet of Things: making the most of the Second Digital Revolution'

2020

250,000

Vehicles will be connected to the internet

Source: Forbes, 'A Simple Explanation Of The Internet of Things 2014'

By **2020** vehicle connectivity will boost the global market for connectivity components by...

£127 billion

Source: McKinsey: 'What's driving the connected car?'

APPLICATIONS IN THE COMMERCIAL VEHICLE SECTOR

AUTONOMOUS CARS

CONNECTIVITY ALLOWS VEHICLES TO COMMUNICATE WITH THEIR ENVIRONMENT.

By collecting data about road, traffic and weather conditions as well as route information, they can operate with little or no human input.



Source: Department for Transport, 'Driverless vehicles: connected and autonomous technologies', 2015

GOOGLE'S SELF DRIVING CARS



FEBRUARY 2016: U.S safety regulators announce that Google's artificial intelligence system could be considered the driver.

FLEET MILEAGE

FAILURE TO RECORD FLEET MILEAGE WILL LAND YOU IN TROUBLE WITH HMRC.

Smartphone apps and dongles can be installed in vehicles to track mileage information from journey start to finish. This can be then be downloaded and kept on file by the fleet manager.



Source: Fleet News, 'Apps and dongles help you comply with HMRC', 2015

FUEL EFFICIENCY



THE INTERNET OF THINGS CAN HELP FLEET MANAGERS reduce excess speeding and idle time and improve routine maintenance so that they can ensure vehicles are operating optimally at all times. It can also provide real-time information on geolocation, weight and cargo which could reduce fuel costs by up to 25% and increase fleet utilization by 20%.

Source: Built-in Fleet Intelligence: The Bottom Line, Telogis.com

Fleet managers can use data from truck driver's driving behaviour (e.g. their speed, braking patterns) to offer real-time advice on how to adjust their style to maximise fuel efficiency.

Source: Intel, 'Driving an IoT Revolution in Fleet Management'

VEHICLE HEALTH

SENSOR TECHNOLOGY CAN MONITOR VEHICLE HEALTH.

Smart valves installed in the tyres of commercial vehicles collect data on things such as air in tyres, tyre tread and tyre age.



Source: Intel, 'Driving an IoT Revolution in Fleet Management'

FLEET MANAGEMENT



FLEET MANAGEMENT PLAYS A CRITICAL ROLE IN MANAGING MAINTENANCE SCHEDULES, EVERYDAY VEHICLE USAGE AND SERVICE ROUTES.

To maximize productivity and operational efficiency, fleet downtime must be minimized. With mobile scanners, computers and RFID systems alone, enterprises can gain visibility into their assets and better streamline operations to keep their fleet moving.