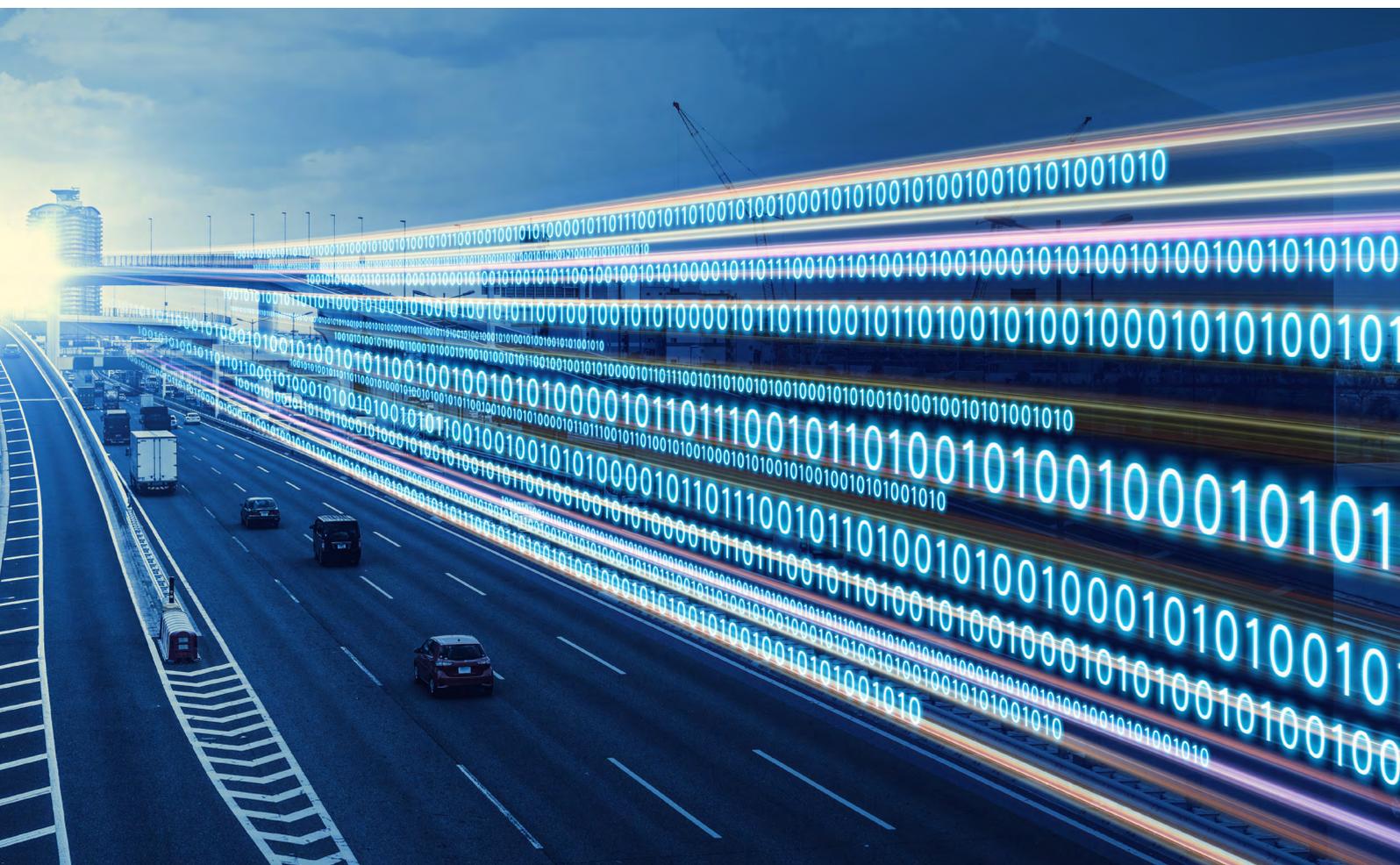


Whitepaper

The Cost Savings of Telematics





Definitions

Telematics: Telematics is a multi-disciplinary field that combines aspects of telecommunications, transport, road safety, engineering, and computer science. It utilises all these technologies to collect data on the operation of your fleet and assets. Telematics has the potential to solve many different problems in the arenas of fleet management and transportation.

The Cost Savings of Telematics

Telematics has been proven to provide cost savings across a wide range of industries and applications. Through identifying inefficiencies in fleets, monitoring and recording vehicle movements and operations, to understanding the impacts of driver behaviour, telematics enables organisations to save money.

AVERAGE PERCENTAGE OF DECREASES WITH TELEMATICS



SOURCE: BOBIT BUSINESS MEDIA TELEMATICS SURVEY, SUMMER 2015

Fuel Use Reduction

In 2016 the average Australian vehicle travelled 13,716km and used \$2,366 on fuel for the year¹.



Driver behaviour has a drastic impact on fuel use. With telematics, driver behaviour can be recorded and addressed in a much more efficient manner⁴:

- Drivers with aggressive driving styles will use an average 10.9% more fuel vs your average driver.
- Drivers who use cruise control save an average 5% in fuel use.

Improved dispatching and routing of vehicles is also enabled using telematics. Through having an overview of the location of all your fleets vehicles, you can better route and dispatch vehicles to jobs that are more local.

- Smartrak has seen clients reduce the distance their fleets travel by over 5%.

This had impacts across fuel costs, depreciation, fleet size and maintenance costs.

Auditing vehicle use can also have a significant impact on overall vehicle usage. By using systems like TrakWise Pool Booking to manage and audit vehicle use, unauthorized and non-business use is reduced by an average of 10.6% of the total fleet distance travelled.

Idle time for vehicles can also be a hidden cost quickly identified and reduced through the implementation of telematics. The average idle time of a vehicle is 25% of its overall operation time per day, with heavy equipment and plant seeing up to 40% of their time idling. For a normal truck idling 25% of its working day, this idle time represents \$2,500 of fuel per year. Using telematics, you can identify vehicles and/or operators who are idling excessively, enabling you to educate and change their behavior, and ensure this changed behavior is maintained into the future⁶.

Fleet/Asset Resale Value

Telematics can also minimise the impact of depreciation on the value of fleet and plant assets as excessive idle time can accelerate the depreciation of your machinery.

An example provided by IPWEA: A Caterpillar 12H grader for example could be worth \$30,000 less if it has 10,000 hours on the hour metre compared to the same machine that cut its idle time by 25 percent and so only has 7,500 hours⁵.

Non-productive idle can be identified using telematics to help provide benchmarks and identify excessive non-productive idle time.



Fleet Downsizing

Using telematics provides a deeper insight into peak vehicle utilization, and the efficiency of your fleet. Using Telematics, you can identify fleets or pools that are over resourced and those that are under-resourced, enabling transfers between pools, downsizing of unrequired vehicles and acquisition of appropriate vehicles for under-resourced pools.

Insurance costs – Collisions/Accidents

Insurance is an often-overlooked cost of business, especially when you will likely have claims that arise across the year as the result of accidents. Fleets on average have 20% of their vehicles involved in an accident every year.

The use of telematics can therefore have a significant impact on fleet accidents through improved management of driver behaviour and reducing risks such as driver fatigue⁶. Some statistics include:

- 80% reduction of fleet incidents
- 54% reduction of client crashes
- 30% reduction of the number of claims
- 50% reduction in the fleets claim costs

Additionally, the costs beyond fleet down time are significant. "The average total insurance cost inclusive of property damage, workers compensation and third-party costs was \$28,122 per incident"².

Fringe Benefits Tax (FBT) Compliance & Electronic Logging

In some cases, FBT can be reduced by adopting the Operating Cost Method to calculate liability. Smartrak features electronic logging as part of the EyeQ system to automate the collection of trip data, which can help identify vehicles with high business usage. This simplifies tax compliance.



Maintenance

The use of telematics enables better control and visibility across your fleet regarding distances travelled and maintenance. With this better control, you are able to undertake proactive maintenance, which has been proven to reduce costs³.

- Checking and adjusting the pressure of your tyres once a month can increase a vehicle's fuel efficiency by up to 3%
- Keeping a car tuned and well maintained can improve its fuel efficiency by an average of 4%
- Major maintenance problems can reduce your fuel efficiency by as much as 40%
- Removing unnecessary weight such as tools and clutter can improve your fuel efficiency by 1-2%

The Bobit Business Media telematics survey outlines that almost 37% of respondents reported improved vehicle maintenance through use of a telematics system.

Fleet Productivity

Fleet productivity is a key area that telematics assists in enabling. Through the implementation of telematics, fleets see labour costs reduced by an average of 12% as a result (Nolan, 2015). This reduction comes through the reduction in idle time of staff, be they waiting for their next job dispatch, vehicle maintenance downtime, etc. improving the productivity of your existing resources.



Some statistics Smartrak Customers have achieved:

University of Waikato:

- Fuel costs have dropped \$100k in 2 years
- Traffic fines reduced from 36 to 5 per year
- \$200k reduction in rental vehicle per annum
- Windscreen repairs and replacements reduced from \$16k to \$9k per annum
- 25.7% reduction in total fleet fuel use

Yarra Valley Water:

- \$125,000 in savings on insurance claims in one year

Norwood Machinery:

- Improved driver safety – a reduction of an average 2,000 overspeed events per month within the first few months of installation

References and Links



1: <http://www.abs.gov.au/ausstats/abs@.nsf/mf/9208.0/>

2: http://www.carsq.qut.edu.au/publications/corporate/work_related_fs.pdf

3: <https://www.exxon.com/en/car-maintenance-tips>

4: <http://acrs.org.au/files/arsrpe/RS010036.pdf>

5: <http://www.ipwea.org/blogs/intouch/2017/02/27/this-is-not-idle-chat-the-real-cost-of-idle-time>

6: <https://www.mckinsey.com/~media/McKinsey/Industries/Automotive%20and%20Assembly/Our%20Insights/Gearing%20up%20for%20growth/Gearing%20up%20for%20growth%20Future%20perspectives%20on%20the%20global%20truck%20market%20Aug%202016.pdf>

7: <http://www.automotive-fleet.com/article/story/2015/10/how-to-increase-fleet-productivity.aspx>



About Us

Combine an innovation culture with the real-world experiences of people at the sharp end of fleet management and you get the solution you've been waiting for – Innovation that delivers applicable, proven benefits.

Smartrak's solutions have been tested and proven in deployments throughout North America and Australasia, and we're proud to say that our customers have witnessed greater productivity, improved operational flexibility and reduced management workload with every solution we've implemented.

Bringing world-class expertise to fleet and mobility management.

Smartrak is proud of our Fleet and Mobility management solutions. Building on an eight-year heritage of support for government, education, healthcare and community service organisations. Our solutions are helping clients of all sizes do more with their fleet and assets, and enabling them to gain the efficiencies that class-leading mobility technologies provide.

As a business unit of the Volaris Group, which is a division of Constellation Software, Smartrak draws on significant intellectual, financial and logistical resources. Our products and services benefit from an extensive innovation ecosystem, where new ideas can be shared and tested, so that breakthrough solutions are offered to you.

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