









What Is Vehicle Tracking

- Many of you will immediately think Big Brother
- Telematics is really about giving the business a greater visibility of its staff and assets
- Same way that business look out for their staff on the premises they have responsibility to look after them off the premises
- 5- 10 yrs ago it was about a dot on a map, today telematics offers FBT, health and safety, productivity, routing and asset management solutions plus much more



How does it work?



Data Collected and processed onboard

- Vehicle tracking
- Driver behavior
- Vehicle operating status
- Vehicle conditions

Data transmitted using Telstra Network

Data processed & secure storage

Web/mobile interface for real time reporting







PRODUCTIVTY

OH&S – What are the Challenges

- Responsibility for your drivers is not just for transportation companies, it applies to all businesses with a fleet
- Grey fleet is heavily neglected fleet carrying a large risk
- Understanding driver behavior can assist with vehicle policy & training
- Even minor accidents can cause increased premiums, lost workdays
- Lone workers can be staff driving to remote locations, visiting at risk patients, workers nights



OH&S – How does Telematics Help?

- Identify speeding & rough driving, drivers most at risk of accident
- License checks, demerit points
- Second by second analysis of how the vehicle was being driven and what led to the accident
- Camera technology has taken this a step forward with footage of the incident, vehicles and drivers
- Collision avoidance technology can warn drivers of behaviour
- Duress pendants provide realtime alerts



PRODUCTIVTY – WHAT are the Challenges

- Understanding utilization and purpose
- More accurate way to determine overtime
- Replacing manual logbooks with electronic logbooks covering service visits, time of arrival, time spent, time departed
- When too much customer time is not good
- Locating the closest vehicle to the job
- Improved routing reduces cross city travel
- How much personal use is too much



PRODUCTIVTY – How does Telematics help?

- Polling can give you LIVE position within 10m
- Each activity is recorded, ignition on, movement forward, turn, speed, location, ignition off. Trip details.
- Which vehicles are doing the KMs and which aren't
- Geofencing allows for reporting on specific locations
- Electronic Logbooks which are ATO approved can reduce paper based logbooks which are time consuming and filled with errors
- Logging of Off Road Travel
- Integration with job management platforms
- Tracking of trailers and other equipment
- Theft prevention by tracking unauthorised usage



VEHICLE HEALTH – What are the Challenges

- On average your staff are driving around with assets worth \$30 - \$50k. Trucks start at \$100k and then add the trailer.
- Typical running costs of a vehicle are \$15k -\$20k pa
- FMO have penalties for non servicing and excessive mileage
- Reduced value at sale



VEHICLE HEALTH – How Telematics helps?

- Live odometer data assists with scheduling maintenance
- Live Engine Faults assist with preventative maintenance
- Fuel card integration can match refill location with actual location
- Maintenance scheduling based on mileage, time and engine hours



- Big data supports the development of smart buildings, transportation infrastructure, communication networks, and now smart fleets.
- Telematics delivers socio-economic benefits via efficient routing, safer roads, fewer greenhouse gas emissions, and a more efficient supply chain.
- Alphabet's <u>Sidewalk Labs</u> is an example of how these dots are being joined.



With so much data generated by vehicles and drivers, it is inevitable that Business will transform with mobility solutions





- Historically, drive to use Telematics has been regulatory or a necessity. Objections were Price, Installation & Data.
- Easy-to-install, plug & play telematics devices.
- Rich vehicle data (real odometers, engine trouble codes, engine status and accident data) that benefits all customers.
- FMOs as the largest vehicle buying groups are fast becoming a player in this space. We are also seeing fuel suppliers, Vehicle Dealer groups, Car Sharing businesses drive the use of this technology and creation of data.



- Telematics enables FMOs to automate mileage, anticipate vehicle maintenance and parts flow, while enhancing the remarketing value of their fleet. Such automated measures are enabled by data-centric processes.
- It also enables the delivery of new platforms such as Car Pooling.
- Australian FMOs have been slow to take up



Smart Data Revolution

In the last year alone, I have worked on projects:

- Car sharing community
- Fuel retailers
- Insurance companies
- Geolocation for every premises household/business
- Vehicle Dealerships
- FMOs
- Truck Manufacturers
- OEM Engines Suppliers



Smart Data Revolution

- Geotab collects over 900 million points of data each day
- Start times, travel times, idling times, stop times, loading times, break times, deliveries per day, driving routes, detours, braking, acceleration, tail gating, lane changing, speed highs and lows, potential accidents, live locations – EVERY BUSINESS HAS A NEED FOR SOME OR ALL OF THIS
- ENGINE DATA IS A NEW FRONTIER
- Understand real world fuel economy, when alternators break down, when starters or batteries will fail, tyre pressure and wear trends, oil viscosity, and when and where accidents happen, or are prone to happen.



Smart Data Revolution - Mileage

Knowing real mileage assists to determine Servicing, Productivity, Asset Value and Asset Management.

- GPS odometer is 10 15% off
- Fuel Card data all over the place
- Real Mileage (Odometer) comes from the vehicle's computer



Smart Data Revolution – Accidents

Human behaviour counts for over <u>ninety percent</u> of all accidents.

Accident detection data can identify its severity, recreate the accident from brake position to rpm and accelerometer events.

This data assists with insurance investigations, road management, routing and logistics, driver coaching and people management.



Smart Data Revolution – Collision Avoidance

In-vehicle alerts play an important role in making Drivers Aware about what is going on inside and outside the vehicle, preparing the driver to react.

Does your business need to know about warnings and near misses?

Can you reroute the vehicle's path, reduce potential legal and insurance exposure



Smart Data Revolution – Maintenance

Valuable vehicle engine data eg electrical, tyre pressure and engine faults is used to identify issues and manage repairs.

Data can be combined with vehicle behaviour, or external factors to determine wear and tear of vehicle electrical/mechanical parts



Smart Data Revolution - HOW



Appian DirectRoute and DRTrack By TMW Systems

By Grace...



OnCommand By Navistar...



Dynamic Vehicle Maintenance ...



Cummins Connected



Weekly Idle Cost - (L) ...



Lone Worker Extended Vehicle



Analyze GPS Data By Didcom SA de



Interactive Dashboards By Geotab Inc.



Asset Tracking By Cirrus Link...



Zendu Multi-



Mobileve Exception



Athena – Big Data



Weekly Idle Cost (US Gallons) ... By Geotab Inc.



DISC Mobile By Profit Tools....



Engine Light Percentage

By Geotab Inc.



Engine Data Analyzer

By Didcom SA de ĊV



Simple Time Tracking

By PaperDoDo Inc



Connect Mobile Capture

By EBE...



Driver ID with NFC technology

By Geotab Inc.



Lone Worker Extended Vehicle



Unassigned Drivers Report

By Geotab Inc.



Garmin - GPS By Garmin Intl



Refrigerated Trailer

By Valor



Live In-Vehicle Verbal Feedback

By Geotab Inc.



Case Study

- Margin on car sales is decreasing
- Dealerships make greater revenue from after-sale servicing
- Integrated telematics tells you:
 - Live engine odometer
 - Live engine faults
 - Fuel levels and fuel economy
 - Tyre pressure
- Can a Dealership use this data to pre-empt a service, save you from damaging your vehicle?
- Can a fuel retailer entice you to fill up when you approach them with an offer?

