Holman

Driving What's Right

Using Big Data to Identify, Predict and Prevent Critical Issues

INTRODUCTION

The range of opportunities to leverage Big Data continues to expand in the 21st century. However, the more data that is tracked, the more difficult it becomes to understand what actions to take to realise significant cost benefits and efficiency gains to business operations.

In order to create tangible outcomes, successful fleet managers must find partners and solutions that provide actionable insights.

Fleet management companies can help guide fleet managers by first defining clear business objectives, then producing a fully-integrated data analysis solution, complete with forecasting and predictive modelling, which lowers the total cost of ownership across the entire vehicle life-cycle.



LEVERAGING BIG DATA

TO SOLVE YOUR BUSINESS CHALLENGES

Big Data has become a challenge for many businesses and industries, and fleet management is no exception. Fleets now have the capability to track hundreds of data points on every vehicle in their fleet. While fundamentally good, the quantity of data that suddenly becomes available can be startling.

Modern fleet management requires the ability to refine this incredible wave of data into actionable information that helps guide the strategic decisionmaking process.

A company needs to be able to develop reports that provide insight into a fleet's day-to-day operations, and more. Companies need to be able to develop reporting that can help Senior management see the broader impact that the fleet has on a business and understand with precision what decisions need to be made to ensure that the investment made into this area of the business delivers meaningful returns.

Instead of simply trying to sort through mountains of fleet management data, the future is focused on intuitive analytics coupled with management through Outliers.

By using statistical analytics combined with big data, actionable insights can be Leveraged to pinpoint the exact vehicles that create the costliest inefficiencies that result in the increased spend to a fleet.

Statistical analytics and Big Data can help pinpoint the **EXACT VEHICLES** creating the costliest inefficiencies and increased spending **WITHIN A FLEET.**



BIG DATA

CHURNS OUR BIG PROBLEMS

Organisations are operating in the age of analytics, and Big Data is the method used by many to identify patterns, trends, and associations.

According to a December 2016 report by McKinsey & Company, while Big Data's potential keeps growing, taking advantage of it means corporations must incorporate analytics into their strategic vision to make better and faster decisions.

Many organisations, however, have failed to make a big impact with Big Data. Instead, the report found only a small amount of the potential value from data and analytics were being captured. A disconnect remains between turning these insights into actual changes that positively impact the bottom line.

The trends found in the McKinsey report are echoed throughout the fleet industry. Over the past five years, fleet management companies have partnered with software giants to develop sophisticated solutions for managing Big Data, so that it can yield valuable insights. Every data point tied to a vehicle can be tracked from telematics, driver safety, fuel transactions to maintenance transactions. In a given year, a fleet of 300 vehicles will generate an average of 1,254 data points associated with maintenance; if you add fuel data this number jumps to 30,000 and once telematics is added, the number of data points rises to just over 15 million.

In any given year, how many data points will a fleet of 300 generate?



Without a tactical **plan** to harness the power of that data, many companies will simply end up with a lot of **facts** and very little effect.

DROWNING IN DATA

LOTS OF INFORMATION WITHOUT THE WHY

While initially seen as a breakthrough within the industry, Big Data became overwhelming and not the empowering advancement it hoped to become. The first generation of data analysis tools created a general idea surrounding the fleet but no concrete evidence to allow companies to make strategic decisions.

The data produced extensive detail about the fleet's operations but couldn't tell fleet professionals why something was happening, and more importantly – how to prevent it.

- Why was the fuel spend increasing?
- Why were maintenance costs in one cost centre higher than the other?
- Why should drivers stick to the assigned preventive maintenance schedule?

Time was wasted wading through mountains of data to find the incidents that impacted the fleet the most. Ultimately, how good is having access to data if there isn't anything worthwhile that can be done with it?



UK data-driven firms are **40% MORE LIKELY** to report launching products and services ahead of their competitors than those who aren't data-driven.



The global market for big data has been estimated to be \$10B in 2012 but soared to **\$50B IN 2015.**



THE SHIFT FROM

GENERIC IDEALS TO PINPOINT ACCURACY

The analysis of fleet management data has shifted from an ocean of Big Data to pinpoint accuracy that is vehicle focused. This next generation of fleet management software is successfully deploying expertly-designed statistical analyses that go beyond Big Data reports to generate specific reasons why higher costs are occurring.

Reasons for increased fleet costs may include:

- Premium fuel used
- Odd driving patterns
- The vehicle's age, make or model

Application of the vehicle today, analytical software can plot every vehicle along a bell curve to spotlight high-spend vehicles. Companies can analyse the data quickly with less time spent searching for the highest cost drivers.

Shouldn't fleet personnel focus primarily on the vehicles that require immediate attention?

Advanced reporting tools can now bundle a series of reports and critical key performance indicators (KPIs) and deliver them directly to the fleet manager or analyst who has immediate access to benchmarking information.

Automatically, the exceptions and anomalies become evident, and the vehicles or drivers contributing to the bottom line are clear.

Instead of providing 'theories' as to why spending is moving in certain directions, statistical analysis coupled with Big Data identifies the logic behind the increased fleet costs. The company now has proof of which specific issues can be addressed to produce immediate actions. Statistical analysis coupled with big data essentially puts pareto's 80-20 rule into effect by focusing on the **20 percent** of vehicles likely driving **80 percent** of the spend, which results in a quicker move to more prescriptive action.



MOVING THE NEEDLE FURTHER

PREDICTIVE ANALYSIS IN ACTION

Today the technology is at your fingertips to take data from merely insightful to genuinely impactful.

Partnering with a fleet management company that offers management through exception can produce results that allow companies to make significant changes to their operations with almost immediate results.

Predictive analysis solutions are empowering companies to do deep dives into their data easily, analysing current maintenance data together with the vehicle's previous history in order to establish failure ratios. The opportunity to take the analysis a step further to identify units or components that have not yet had repairs permits companies to more accurately predict and manage future costs.

Once worst case offender vehicles have been identified and action has been taken to reduce the cost to a fleet, intuitive intelligence through statistical analysis will allow companies' perspectives to then identify the next most costly vehicles to a fleet, striving for additional ways to decrease spending even further.

Intuitive intelligence will give companies the ability to focus easily, with laser-like precision, on the units within the fleet that impact the highest cost ratio. The presentation of exactly the right data at the right time will allow leadership to make the right decisions quickly and take remedial action which will result in cost savings and a positive impact to the company's bottom line.

Companies can also use this refined data to improve vehicle selection, specification, replacement cycling, fuel efficiency and maintenance criteria shifting fleet management from a break-fix model to a predict-and-prevent model.



MEASURING FREQUENCY

Predictive analytics measures the frequency of brake failures and repairs and can tell fleet managers that a vehicle will require a brake service after so many months in service and after so many miles on the road.



FORECASTS PATTERNS

This results in budgeting and planning for the work that will need to be done as well as minimizing catastrophic failures through preventive maintenance.



PREDICTS TRENDS

Fleet managers can now predict major and minor component failures, which enhance vehicle replacement strategy as well as year-over-year budgeting.

YOUR LEGAL REQUIREMENT

Collecting and interpreting all this data to deliver insight and efficiencies will provide huge benefits to you and your company, however it is important to work with a supplier that understands and complies with protection of this data including GDPR which came into effect on 25th May 2018.

The introduction of this new legislation puts individuals back in control of their data and ensures that companies that hold any personal information must do it lawfully. Understanding what impact this has on your own business as well as the legal requirements will be the key to understanding how you can get the utmost from your data sets.



CONCLUSION

PREDICTIVE ANALYTICS CREATES CERTAINTY

Most fleet management companies provide data solutions to their clients. But the ability to decipher and mould data into something that makes a tangible impact has become hard to find. Big Data produces numerous reports that generalise what is going on in a fleet, which only results in more questions and more headaches.

Advanced data analytics is changing this Organisations will be able to take quick action based on solid, real-time data and management by exception. New solutions will provide insight on a fleet's operations quickly, allowing for improved timeto-answer / time-to-decision speed. Efficiencies will increase and costs will naturally decrease as a result. Smart companies should seek partnerships that offer advanced data management with powerful statistical analytics in order to create actionable insights that help drive positive results within fleet operations and the overall bottom line.



Holman

Holman, previously ARI Fleet UK, has revolutionised funding and fleet management with technology that enables organisations around the world to realise new levels of efficiency and value by leveraging the power of data through the Holman insights portal and other customised solutions. Founded in 1924, Holman, now the largest family-owned company in the industry, has continuously uncovered new ways for fleet managers to translate their fleets' data into decreased costs and improved driver safety. Holman manages more than 2 million vehicles globally with offices in the UK, North America and Europe.

> Learn more at Holman.co.uk, email us at enquiries@holman.co.uk, call us on 0844 8000 700 and follow us on Linkedin, Facebook and Twitter