

Changing the way fleets buy and operate HGVs

In the slim margin world of logistics, the latest data analysis methods are crucial to understanding the true cost of operating a fleet and making procurement decisions that will keep a fleet both competitive and environmentally friendly

In the UK 76 per cent of all goods are moved by road. It is essential that road freight efficiency is a top priority to minimise cost and environmental impact. However, there are significant inefficiencies in how logistics companies operate their vehicles. Logistics is highly competitive and this drives extreme cost cutting within the industry. However, there is a complex relationship between capital costs and operational costs. Often fleets spend too little on their vehicles and suffer increased fuel bills and carbon emissions. This article explains how a high-tech data analysis company, that previously helped Team GB win more gold medals, is helping logistics companies make significant operational cost savings through smarter purchasing.

The Procurement dilemma

The culture of the logistics industry favours reduced capital expenditure over reduced operational expenditure, since it is easier to achieve. Minimising operational costs such as fuel consumption often requires increased capital expense with the outcome only becoming clear after the procurement decision has been made.

A clear example of this dilemma is the tyre industry. The more expensive premium brands offer tyres that can save fuel, but this can be to the detriment of wear rates, and therefore tyre costs. Conversely, manufacturers of cheaper tyres have gained market share as many fleets are favouring the lower upfront cost, perhaps to the detriment of fuel economy. Premium manufacturers now need to prove that their tyres will provide both reduced fuel costs and longevity. However, proving the performance of a tyre in the real world is highly complex.

Wincanton, the largest British logistics company, is constantly dealing with this dilemma. Dave Rowlands, Wincanton's Technical Services Director explains. "Due to the complexity of our transport operation it is very difficult to clinically model the impact of various purchasing decisions on our operating costs. Therefore, we make purchasing decisions based on the strongest evidence to hand, which in the absence of



any reliable empirical data can result in the lowest price, but not necessarily the best value. With the development of sophisticated big data analytics in our industry, we would like to begin using these methods to reduce our total costs through smarter purchasing."

Knowledge is power

Dynamon has developed a specialist data analysis service to give logistics companies the knowledge to make procurement decisions that balance capital expenditure with operational expenditure. Dynamon analyses fleet's existing telematics data to simulate alternative procurement decisions. This identifies the optimum vehicle configuration which minimises total cost and environmental impact.

Dynamon was founded by Dr Angus Webb. "Fleets are not taking advantage of the valuable data they are collecting from their telematics. We are analysing this data and identifying significant cost saving opportunities."

Richard Farren, Dynamon's Head of Software, explains the scale of the data analysis problem being addressed. "The quantity of data we are analysing is immense. We take a live feed from a fleet's telematics data, and from that generate a further two million analysis data points daily per vehicle. This produces a set of 'what-if' scenarios that logistics companies can use to identify efficiencies and make procurement decisions."

Knowledge in action

Dynamon's service is currently being used by Wincanton. Dave Rowlands explains. "We have been working with Dynamon for the past twelve months. They have a direct feed from our telematics to run their data analytics. From this they have identified significant cost and CO₂ reduction opportunities which we are now pursuing. The insight that Dynamon has produced is very impressive and demonstrates a wide range of opportunities to continuously improve, and drive down the cost of running, a multifaceted logistics operation."

Dynamon has been awarded two Innovate UK government funded projects to expand the number of procurement decisions it can analyse. Dr Chris Durrant, Dynamon's Head of Analytics, explains the value of these projects. "In addition to analysing telematics data, we need accurate data on products that fleets buy and, in most cases, this does not exist. Where data is available, products are tested under ideal conditions and rarely deliver the same performance in reality. Tyres are a great example of this. Although all new tyres have a laboratory measured EU energy rating, tyres perform very differently in the real world and are affected by many factors that are not captured, including weather, wear, inflation pressure, and specific drive cycles. One of Dynamon's greatest challenges has been developing a model which fully captures this complexity. With Dynamon's data analysis service, for the first time, fleets can confidently make purchasing decisions with a clear understanding of the operational cost savings they will achieve." ■



FURTHER INFORMATION

www.dynamon.co.uk
enquiries@dynamon.co.uk
 +44 (0) 2380 985410