

fleet management

Technology over-drive

Effective fleet management is a vital component of the commercial transport industry and a major factor in overall logistics costs. **FOCUS** looks at some of the gadgets and systems available on the local market to help make the jobs of fleet managers that much easier – and far more successful

According to Brendan Horan, general manager, sales and marketing at MiX Telematics Africa, many of the challenges facing fleet owners are not only interconnected, but can be addressed with sophisticated vehicle tracking and fleet management solutions.

These challenges include the health and safety of drivers and other road users, fuel savings and vehicle tracking.

Marcus Momberg, transport manager for Hi5 Carriers, a local operator, believes that the company's reliance on Digicore's C-Track fleet management system over the past five years has been invaluable in managing the company's transport operations.

"Knowing where each of your vehicles is at all times is tremendously useful. Up until a few years ago, a transport manager had no idea where a specific vehicle was until it arrived at its destination. All you could do was hope for the best. Now we can monitor a vehicle's movements in real time," he explains.

Gert Pretorius, managing director of MiX Telematics (Enterprise), says that managers are looking for solutions that make active fleet management possible by delivering accurate, meaningful data in real time, thereby facilitating sound decision making.

"With the economic downturn placing significant strain on all business initiatives, fleet managers have begun to fully appreciate the value of utilising fleet management products as a strategic tool for improving profitability and creating long term sustainable



There are a number of well known companies offering a host of products and services available in South Africa. We sneak a peak at some of these options.

Fuel thieves thwarted

The explosion in fuel theft that South Africa began experiencing a few years ago has led to a number of innovative solutions. Take, for example, ACS' Autotrak-Supreme, a cutting-edge fleet management system that includes the ability to monitor a vehicle's fuel levels in real time.

"There are so many access points to a fuel system that it is virtually impossible to seal the entire system," explains MD David Winsper.

"Upon addressing the problem of fuel theft from a fleet management perspective, it quickly became clear to us that the solution did not lie in sealing the system but rather in monitoring it and actually tracing fuel usage and theft."

Essentially, Autotrak-Supreme consists of an on-board unit that monitors a

vehicle's operations, saving information and uploading it to a central server where it can be viewed and analysed by the vehicle's fleet manager, both as a single unit and within the context of the fleet.

As an integral part of this real-time system the fuel monitoring device measures exact fuel levels, uploading the information on a minute-by-minute basis. Naturally, this means that fuel consumption can be accurately recorded but, more importantly, that any sudden, inexplicable changes in fuel levels are almost instantly noticed.

"The system is not designed to prevent would-be thieves from accessing the fuel, but rather acts as a deterrent, particularly as drivers tend to be the biggest culprits of fuel theft, or at the very least are complicit in the theft of fuel from their vehicles," says Winsper.

The premise of the system is based on continual monitoring and reporting of the fuel tank level. If the level drops excessively, a warning is generated immediately to the web site central server and optionally to mobile devices such as

"With the economic downturn placing significant strain on all business initiatives, fleet managers have begun to fully appreciate the value of utilising fleet management products"



Thanks to modern technology, fleets can now be monitored electronically in real time.

savings," he explains. "With fuel being one of the primary cost drivers in fleet management, effective fuel management is particularly important. Additional solutions can be implemented using the information provided by a range of fleet management products."

According to David Winsper, managing director of Automotive Control Systems (ACS), one of the most exciting aspects of fleet management is the fact that technology has reached the point whereby any vehicle, anywhere in the world, can be monitored on a second-by-second basis from an external control point.

Monitoring capabilities include: where the vehicle is; whether it is stationary or on the road; how fast it is travelling; how the driver is operating the vehicle; how fuel-efficient the vehicle is; and real-time fuel level monitoring. The scope of current technology is far reaching, giving fleet managers a degree of control unheard of until quite recently. ■

the fleet manager's cell phone, advising of the theft in real time and location.

Maximising fleet control

"C-track MaXx is a new product that gives managers as much control over their fleets as possible. This software allows them to manage fleets in real time, but, more importantly, use this software to access important information quickly via the latest data warehouse and business intelligence (BI) technologies," states Deon du Rand, MD, DigiCore Technologies.

One of the most impressive capabilities of C-track MaXx is its ability – through its Mobile Resource Management (MRM) module – to interface with on-board third-party solutions such as Garmin GPS (global positioning systems) navigation systems.

"Through this system, instructions and new destinations can immediately be sent to a driver. All the necessary information regarding the location is instantly transferred to the navigation system," explains Du Rand. "This makes it ideal for an environment where vehicles have to be dispatched quickly and accurately."

Another impressive enterprise feature is the software's ability to mirror the actual hierarchical structure of a business through customisable cost centres and business groups.

"This capacity to mimic a company's organisational structure provides managers with all the information they need regarding a fleet's daily activities in the context of the company's own structure. This makes it much easier to measure and manage individual business groups and cost centres effectively," he says.

A greener future

South Africa is on the brink of introducing stringent regulations regarding the CO₂ emissions of trucks and other vehicles on the roads. MIX Telematics' fleet management solution to this latest development is the FM Communicator, a product that is used worldwide and can monitor CO₂ emissions, adhering to

strict standards already implemented in many other countries. The system clearly indicates if a vehicle is over the limits, so managers can educate drivers as well as adapt operations to function within the necessary CO₂ parameters.

Eliminating guesswork

According to MapIT, running a fleet on sophisticated geographic information systems (GIS) technology takes the guesswork out of tracking vehicles and other moving assets.

Fleet managers can use GPS or GSM/GPRS (global system for mobile communications/general packet radio service) technology and digital mapping to reveal the whereabouts of each fleet vehicle to within a few metres. Operators and despatch controllers can track the precise status and location of each vehicle in real time using scalable maps, visible down to street level.

Digital maps are essential for the planning and optimisation of routes, determining delivery schedules, and replaying routes to ascertain where vehicles have been and where drivers spend their time.

On the wire

Mitrack is an intelligent technology that is able to locate and recover stolen assets throughout the country using a combination of GSM and RF (radio frequency) technology. Because it is a wireless, self-powered unit, it does not require an external antenna or need to be mounted where it can see passing satellites, meaning it can be covertly fitted to most assets without interfering with a vehicle's electronics.

The system's aim is to closely monitor the location of assets (the vehicle itself, as well as its load), providing a reliable method of recovering these assets in the event of hijacking or theft. The wireless nature of the unit makes it particularly effective in asset recovery because, since it is not wired into the vehicle, would-be thieves do not realise the system is in place and cannot disconnect it.