

HOW CAN COURIER AND PARCEL COMPANIES OVERCOME CURRENT CHALLENGES WHILE MAINTAINING AN EFFICIENT AND RELIABLE LOGISTICS SERVICE?
HELEN NORMAN FINDS OUT

Perfect planning

The success of the courier and parcel industry is based on making quick and time-specific deliveries. This is becoming increasingly difficult in a world where congestion is growing every year. For example, in the UK congestion on major roads increased 11 percent in October compared with October 2008, according to figures published by Trafficmaster recently. On the western sector of the London orbital M25 alone congestion grew by 50 percent. These kinds of increases can cause great knock-on effects for courier and parcel companies.

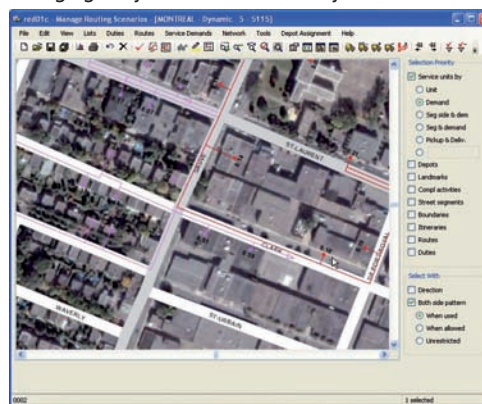
The sector is also facing greater pressure to reduce fuel consumption and vehicle emissions for both environmental and economic reasons. This is difficult when trying to contend with a growing number of cars on the roads. The need to optimise delivery is therefore extremely important. Route planning, driver behaviour and the monitoring of mail are all areas where improvements can be made.

Route planning

Route planning solutions have been available to the courier and parcel industry for a number of years now, but their use is becoming essential as companies try to provide the best service available on the market. GeoRoute, from GIRO, has been on the market for more than 20 years and a new version of the software is released each year, offering customers new or improved functionalities for route-based operations.

Erin Haller, marketing communications manager at GIRO, comments: "GeoRoute helps parcel and courier service providers to manage routes, territories and operations more efficiently, while lowering costs and helping to ensure high-quality services. GeoRoute not only delivers powerful sequencing algorithms for improved dynamic route sequencing, but also provides an algorithm to build territories with a balanced workload over a defined period of time.

"Effective route planning can reduce miles travelled and ensures the most efficient use of vehicle and driver resources. GeoRoute tools enable parcel and courier service providers to adapt easily to changing daily volumes and delivery locations."





FLEET

Monitoring

An equally important issue to consider when trying to optimise delivery is driver behaviour. Blue & Me Fleet from Iveco is a telematics fleet management and driver assistance package, which has been developed on the Fiat Group Automobiles hardware platform and is the result of the combined innovative efforts of Iveco, producers of state-of-the-art professional transport vehicles, and Qualcomm Enterprise Services, the world market leader in integrated wireless communication and information systems and related services.

A recent winner of the Postal Technology International Transport/Logistics Innovation of the Year award, Blue & Me Fleet uses Qualcomm's FleetVisor communication platform to guarantee that customers have a complete overview of the performance of every van and every driver at any given moment. As result of this, fleet managers can coach their drivers and support employees so that they can work more efficiently, resulting in benefits including fuel savings, a more effective use of labour hours, efficient route planning, and a more environmentally friendly operation through reduced emissions.

Giuliano Giovannini, Iveco sales and marketing product director, explains more: "Blue & Me obtains vehicle data, such as fuel consumption, mileage, speed, and engine usage from the vehicle, while also tracking the driver identity so that data can be correlated, allowing a driver's activity and driving behaviour to be

monitored and managed by the company. Blue & Me also delivers tachograph remote download, which is an interface with the digital tachograph that allows remote authentication and download of the tachograph data. Tachometer remote download capability eliminates the need for the fleet operator to access the vehicle directly to download this data."

As well as overseeing driver behaviour and having an efficient route planning solution in place, it is extremely important for companies operating in the courier and parcel industry to monitor the flow of goods. INFORM's SyncroTESS is a software solution for the optimised movement of goods in distribution centres. The system optimises the transshipment of loading units, as well as the scheduling of trucks and railway cars in parcel centres.

Dr Eva Savelsberg, head of intermodal solutions at INFORM, says: "SyncroTESS plans and tracks the incoming and outgoing deliveries, ensuring an optimised distribution of all transport units, such as containers or swap bodies, and manages all loading bays and storing positions for transport units within the terminal. The SyncroTESS solution has successfully automated and optimised the entire container handling process at Swiss Post parcel centres in Dailens, Frauenfeld and Harkinggen. Swiss Post has recently assigned INFORM to further develop this system to improve efficiency."



Mapping

Looking at how this type of software can benefit the courier and parcel industry, Savelsberg continues: "Intelligent software can increase throughput without using extra manpower or purchasing expensive new equipment, saving time and money. This software can increase turnover, while balancing costs in these hard economic times. Posts can strengthen their position in the market and secure a competitive advantage. By optimising operational efficiency, posts see an increase in cost efficiency."

In today's world, companies operating in the courier and parcel industry often have to operate across multiple national boundaries. Therefore having accurate and up-to-date geographic data available is key in order to plan routes efficiently and successfully.

In this area, GfK GeoMarketing has recently launched Europe Map Edition 2009/2010 and an English version of RegioGraph. Christopher Guider, international sales consultant at GfK, says:

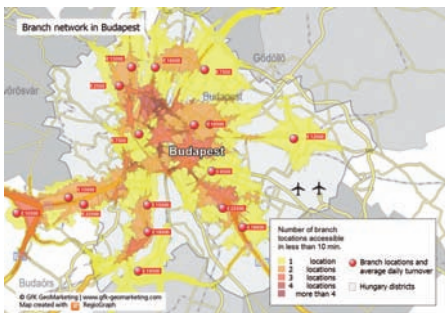
"RegioGraph is our business mapping software solution that enables companies and organisations to import their data, analyse it and display the results on up-to-date digital maps. The maps included with and available for RegioGraph include integrated Tele Atlas street data for Europe, enabling companies, such as logistics organisations, to display and optimise their transport routes for maximum efficiency."

Cornelia Lichtner, public relations manager at GfK, concludes: "The Europe Map Edition 2009/2010, which is a map set for Europe, provides up-to-date date coverage of all of Europe, often down to the most detailed available postcode level. We take particular pride in the detail and accuracy of our postcode boundaries, as these are often used by businesses to associate their data with our maps. Without accurate and up-to-date boundary information, planning will be inconsistent, leading to errors and lost efficiency."

Transport and logistics companies have great amounts of data available to them. The challenge is to bring all this data together in the right way, so delivery runs as smoothly as possible. By choosing the right routes, avoiding congestion, monitoring driver behaviour and using the latest geographic maps, the courier and parcel industry can meet customer expectations by providing services quickly and on time.

SOFTWARE

"Intelligent software can increase throughput without using extra manpower"



All under one roof

DHL has managed to come up with a solution that combines advanced monitoring technology with dynamic route planning. The DHL SmartTruck increases efficiency in both pick-up and delivery. The intelligent route planning system is based on satellite-supported geo and telematic data, which locates the vehicle and analyses the traffic situation. In March, DHL presented its SmartTruck pilot project in Berlin. Two delivery vehicles fitted with dynamic route planning software have been operating along routes in the downtown Mitte district.

"A concept such as this is completely new in the industry," says Dr Keith Ulrich, head of technology and innovation management at Deutsche Post DHL. "Dynamic route planning not only calculates the best route in advance, the system is also the first to account for real-time traffic information in inner city areas, for example traffic jams or construction sites, and adapts the route accordingly. This is made possible by monitoring DHL vehicles and almost 500 Berlin taxis using GPS (Global Positioning System), enabling for the first time traffic flows in inner city areas to be measured and responded to accordingly. This not only saves on costs and time, but also reduces the vehicle's fuel consumption and CO₂ emissions. If the technology proves successful, we will be looking at a significant improvement in our customer service thanks to this innovation."

At first glance the SmartTruck does not seem any different from conventional DHL transporters. Boris Paul, project leader for SmartTruck in technology and innovation management, explains more: "SmartTruck uses radio frequency identification (RFID) and a completely new type of route planning



software, which navigates express vehicles and other vehicles away from inner city traffic jams. The SmartTruck driver is automatically allocated a collection order, which he can complete in the quickest time possible. If he is not able to keep to a given time window for a customer, his order is quickly transferred to another colleague in the destination area."

The dynamic route planning solution on board the SmartTruck was developed on behalf of DHL by Quintiq, a supply chain software specialist. It is the digital nerve centre of the system and processes all the information on the traffic situation, loading and location of the SmartTruck in the DHL operations centre and sends relevant updates, for instance a change of route, to the vehicle's onboard computer.

In addition to this, RFID tags are attached to the parcels held in the cargo space ready to be transported and these contain the shipment identification (ID). In the vehicle's cargo space antennas are installed, which are connected to an RFID scanner. This in turn maintains contact with the onboard computer, which shares the data with the DHL operations centre. ■



SMART