The software solution was applied at the headquarters of Filshill, a Scottish convenience food wholesale distributor, which integrated Optrak’s vehicle routing and loading software (in following also named ‘the software solution’) in August 2010. As main result, the operator has removed 2 vehicles from its fleet as a consequence of accurate route planning and effective vehicle loading. It has improved indicators such as km per delivery unit, total distance travelled and vehicle utilisation (load factor) whilst reducing the time spent planning by 80%.

Benefits:
- Savings: the cost of fuel, insurance, road tax and salaries of the drivers and mates for 2 vehicles that were eliminated amounted to £100,000 per year.
- The operator was able to take the first vehicle off the road relatively soon after going live and a second followed. Total CO2 reduction per item is -3%.
- Total mileage reduction per item is -3%.

Success Factors:
- Willingness to change operations by the fleet manager,
- Willingness on the part of drivers and transport planners to change traditional ways of working,
- Understanding of the concepts underlying Vehicle Routing Software and its implementation and the importance of accurate data.
- The level of savings and efficiency gains depends on the starting point – in this case a manual-based system.

Supported Strategic Targets:
Competitive logistics and transport system; lower congestion; increased efficiency; increased company profitability; minimisation of financial risks; increased competitiveness; increased quality; fewer trucks; lower emissions, limited climate change.

Starting Point/Objectives/Motivation:
A fleet of 30 trucks were delivering up to 500 orders within set time windows on a daily basis across Scotland and Northern England. The operator wanted to achieve more accurate, efficient and consistent transport planning. One goal was to more precisely control vehicle loading, as sometimes planners would over or underestimate what orders can fit onto a vehicle, leading to warehouse staff repacking orders or requiring an extra vehicle to be sent out to handle the overflow.

Solution
Optrak’s implementation team worked with Filshill’s transport and IT departments on the implementation, as well as with Sanderson, who provide the Swords back office system. A preparatory meeting with Optrak consultants helped the operator to review its manual planning processes. The consultants raised key issues for the operator to consider, e.g. determining exactly how long it takes to deliver to an account.

According to the operator, results from the routing system improve with more accurate data. Therefore improvements were made to the collection and management of customer and product data. The planner usually finds that vehicles run out of vehicle floor space, rather than weight, so it was important to establish accurate volume as well as weight information for each product. It was possible to request the majority of this information from the manufacturer and to measure the size of the remaining products on site.
Optrak Realisation works through the following sequence of activities:
Plan: Produce an initial plan; Either using Optrak Operational Planning or by loading a fixed trips directly from an ERP or Sales Order Planning system.
Inform: The system will notify the drivers of their tasks via the on-vehicle computer. Where required, it will let customers know when to expect deliveries.
Track: The software solution will monitor vehicle positions and delivery activities, recalculating the schedules and checking for problems such as vehicles running behind time.
Alert: Problems and other events can trigger an alert to be sent to the operator through emails or SMS.

Act: Adjust the plan, inform the drivers or the customers and ensure the revised plan is carried out.
Analyse: After the plan has been executed, follow up with performance analysis. Track KPIs, extract and analyse data in Excel. Identify problem areas for improvement.
Publish: Use PDF and Excel reports to communicate performance to colleagues and customers.

Key results of the data collection of the Filshill case:
The main changes are at the level of the driver for the routing and of the truck loader in the depot.
The savings generated at Filshill were -3% for total annual miles and CO2-emissions, and two trucks less (worth about 100k£/year).

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