



Case Study: Culligan water

For over sixty-five years, USA Company Culligan has been a world leader in water treatment technology supplying high quality water for drinking, cooking, cleaning, bathing and manufacturing. The company supplies from single apartments to whole towns, in more than 90 countries worldwide and have had an international presence in the UK since 1960.

However, when it came to a need to reduce costs, improve service and grow market share, the company realised that one key management skill that was missing was logistics. Management skills were in the production of high quality water but there was a need to get to grips with the cost and effectiveness of getting that water to UK customers.



Bottled water of the type we are all used to in our offices, represents 40% of Culligan's UK business. They supply in addition salt for water softeners and the servicing and sanitizing of offices water coolers. One of the issues the company faced was that these three services were not integrated and were treated quite differently in logistics terms.

A range of vehicles including transit type vans, 7.5 tonne vans and 7.5 tonne flatbeds for sale deliveries were used. The sanitization was outsourced at a cost of £7.80 for each call.

Jon Wilkinson was appointed UK CEO in 2006 and he quickly spotted the difficulties. His background was in senior management with Parcelforce, DHL and Deutsche Post Global Mail UK.

Mr Wilkinson introduced the concept of logistics metrics to Culligan and was fortunate in being able to take advantage of nine months distribution data collected but not used. Although Culligan did not regard itself as a large fleet operator, they obviously had either too many vehicles or the ones they had were too big. They were in fact operating a fleet mix of 40 x 7.5 tonnes and 11 x transit type vehicles. All drivers were qualified to drive 7.5 tonne vehicles – even those who only drove transits.

Not surprisingly, the water business is highly seasonal and over an eight-week period in July and August volumes increase by an average of 50%. At peak times volumes increase by 64%.

His previous logistics management experience allowed him to harvest low hanging fruit very quickly and he reduced fleet size by 12 vehicles. However, it was also obvious that there were many benefits to be gained by Culligan needed more sophisticated analysis. The changes Culligan needed to introduce were fundamental to running a modern business.

The business had to improve profitability by a significant change to the way they approached logistics. To achieve this Mr Wilkinson approached three companies to help him with this project. This was a competitive approach involving the three companies.

"Only DPS using their Logix routing and scheduling software were able to model the existing operations and costs of the business, the other two could not get close," Mr Wilkinson said. "If they could not model the existing business, there was no way I could have faith in any results from a study. DPS got within 2% of the current situation – a remarkable achievement."

The scope of the study conducted by DPS was very wide, according to DPS Chief Executive Paul Palmer. In looking to improve profitability the options included reducing the number of stops in total, while increasing the number of drops per route and vehicles in order to improve fleet utilisation. There also seemed to be a case for downsizing the vehicles.

"We also looked at the opportunities for integrating the three current logistics operations, water and salt deliveries and sanitisation and reducing or eliminating outsourcing," Mr Palmer said. This had to be achieved by creating in parallel both improved customer service and establishing a new relationship with customers.

From the drivers' point of view, there was the need to make the job more interesting and financially more rewarding; they needed to introduce more customer care and improve service. They were the key to the need for improved customer relationships.

The study conducted by Mr Palmer for Culligan achieved all of the main objectives set by Culligan. Out-sourcing was eliminated completely; water and salt delivery as well as sanitisation service calls were fully integrated. The flat bed vehicles were not required and the fleet balance was significantly changed in favour of vans away from 7.5 tonne trucks.



The cost of sanitisation calls fell by 60% to £3 - while the service level to customers was improved. All small customers agreed to receive calls on either a monthly or even quarterly basis, making this market segment profitable for the first time. The workload was more evenly balanced between the depots, with a reduction in management costs.

"The full year savings to us will be more than £300,000 and the DPS study has brought us considerable improvements in service and in the conditions and job satisfaction to our drivers. We and they now regard them as primarily carrying out a customer service function," Mr Wilkinson told us. "We are now using DPS' Logix routing and scheduling software and we have reached utilisation rates as high as 92% for our fleet – we now only hire in capacity to meet absolute peak demand".

"Most importantly we now know what our deliveries are costing us. The cost for each bottle delivered has fallen by 30% and we have much happier customers. As an added benefit to the staff, we are now employing more people because we have eliminated the outsourced operation".

Of the work done by DPS and subsequently the deployment of the software, Mr Wilkinson commented:

"The approach was a thoroughly professional, no-nonsense one which is exactly what we were looking for. The analysis was delivered on time and produced a very plausible and practical set of recommendations".