The Supply Chain Company®

Green and Lean: Kimberly-Clark Drives Sustainability through the Heart of its Supply Chain

Kimberly-Clark

Kimberly-Clark takes a serious stance on sustainability and environmental responsibility. As the manufacturer of well-known global household brands such as Kleenex, Huggies and Andrex, the company is committed to sustainability in its truest sense and is now starting to reap the benefits of it. The company is both reducing its environmental impact and running a lean and efficient supply chain, which in turn brings real benefit to its biggest customers, grocery retailers, and ultimately to consumers. Along with other initiatives designed to improve its impact on the environment, Kimberly-Clark has implemented i2 Transportation Management solutions in its European and North American operations, to reduce its carbon dioxide (CO2) output, while also reducing costs.

Toilet tissue, paper towels, diapers and tissues quickly fill up the shopping bags on a trip to the supermarket. They may not weigh much, but they do take up space, and this creates a range of transportation challenges. Most of Kimberly-Clark's products have a large "cube size," but a relatively low price per unit. As a result, transportation costs comprise a significant proportion of the product costs. "Transportation is 6 percent of our net sales value and quite a big number on the profit-and-loss sheet," says Peter Surtees, European Supply Chain Director of Kimberly-Clark. "In addition, transportation inflation is inevitable as oil prices, green taxation, road taxation, the Working Time Directive of the European Union and driver shortages all affect rates."

In an effort to minimize its transportation requirements, Kimberly-Clark maintains manufacturing plants across Western and Central Europe and strives to produce 70 percent of its products in the same country in which they are sold. Even so, the company is still responsible for organizing more than 100,000 freight movements per year. All of these movements take place by road, and with customers in every corner of Europe, there are no primary routes.

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Previously, Kimberly-Clark used a hosted transportation management system (TMS) to help it contract out its shipments to third-party haulers. Every time that it booked a truck movement using the software, it paid a fee to the software owner. While this solution met Kimberly-Clark's day-to-day needs, it did not enable the company to implement more flexible contract allocation processes to minimize costs. "Our existing TMS didn't offer us the functionality we wanted," says Surtees. "It restricted our ability to do some more imaginative stuff, to operate strategically and to exploit opportunities to reduce costs."

Kimberly-Clark uses SAP applications in many different areas of its business, but decided against deploying SAP's transportation management solution. It conducted a full review of the solutions available in the market and selected the i2 Transportation Management solution. "At the time, SAP didn't offer the functionality that we needed and we weren't prepared to wait," says Surtees. "i2 was the most functionally rich solution available and enabled us to run the transportation model that precisely suited our business."

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Savings of £2 million…

Following a three-month design phase, the i2 Transportation Management solution was rolled out to cover all European operations within just one year. In a parallel project, the i2 solution was also deployed at Kimberly-Clark in North America. "Compared to other software implementation projects that the company has undertaken, the i2 implementation was a relatively easy process," says Surtees.

Kimberly-Clark uses the i2 Transportation Management solution to operate a league table, which ranks available carriers according to the lowest cost per route. The company has no long-term, fixed commitments with its suppliers, so carriers can increase or decrease their prices flexibly, depending on different circumstances. For example, if a hauler has a partially empty truck that is already scheduled to travel between two cities, it may want to offer very competitive rates to Kimberly-Clark to enable it to fill the remaining space and create a more cost-effective route. Equally, if a carrier knows that it has trucks due to return empty from regular deliveries to a specific location, it can offer lower rates to Kimberly-Clark to fill this capacity on the return trip.

The i2 Transportation Management solution keeps an up-to-date record of all prices offered by all carriers per route at any one time, and then as orders come in, it automatically offers the contract to the lowest-price carrier. If this carrier is unable to fulfill the job, the software automatically forwards the order to successive carriers until the best available price for the route is obtained. To enable this process, the i2 software is tightly integrated with Kimberly-Clark's SAP order management system and an external messaging system for communicating with carriers. "More than 80 percent of our freight movements are handled by our first-, second- or third-choice carrier for price on every route, and this is a key performance indicator for our business," says Surtees.

The system has been extremely successful in enabling Kimberly-Clark to find the most cost-effective operators by route and consequently reduce its costs. The company estimates that it will save £1 million a year by allocating transportation contracts more cost efficiently, route by route. In addition, the company saves £1 million a year by not having to pay fees to its software provider for each truck movement scheduled.

…and half a million kilograms of CO2

Because of the flexibility and automation of the i2 solution, Kimberly-Clark has been able to increase its carrier base to 170 companies, while decreasing its administration costs. It now does business with more small and niche operators, who are often more competitive on certain routes and more likely to have return legs to fill. "The more carriers you have, the less empty running you have and it's a virtuous cycle," says Surtees. "When we reduce the number of miles travelled on the company's behalf, we directly contribute to a reduction in CO2 emissions."

As a result, the i2 solution has enabled Kimberly-Clark to become greener. One gallon of diesel produces 12 kilograms (kg) of CO2, according to figures provided by the company. [Editor's note: 1 kilogram equals 2.2 pounds]. Therefore, if its trucks travel an average of 8.5 miles per gallon, every mile that Kimberly-Clark takes off the road leads to a reduction in CO2 of around 1.5 kg. The company estimates that its £1 million savings corresponds to a reduction in mileage of 380,000 miles and a reduction in CO2 of as much as 540,000 kg.

Some organizations still see environmental responsibility as a cost. But Kimberly-Clark is among those companies that successfully demonstrate that a focus on sustainable business practices goes hand-in-hand with cost reduction and efficiency. Through its use of advanced supply chain management tools, it has saved money, moved a step closer to being an indispensible partner to its retail customers and proven that it is indeed possible to be both lean and green.

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