

A large red and white 'LM' logo is visible on the left, with a chain-link fence and a multi-story industrial building in the background. The building has 'LEMVIGH-MÜLLER' written on its facade.

AMCS Case Study Lemvigh-Müller

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Automatic planning has resulted in greater capacity utilisation and a reduction in mileage and vehicles.

Lemvigh-Müller in brief

Lemvigh-Müller is the largest wholesaler within steel and technical installations in Denmark. Lemvigh-Müller employs 1,200 people and has a turnover of approximately 600 million euros. The company's two primary business areas are technical installations as well as steel/metal and the product range consists of approximately 300,000 items.

The company's distribution is handled from the main terminal in Randers and hubs in Kolding, Slagelse and Brøndby, however, the distribution in Eastern Denmark is outsourced. With day-to-day deliveries, large fluctuations in number of daily deliveries and products of very diverse shapes and sizes, Lemvigh-Müller's planning and distribution is rather complex.

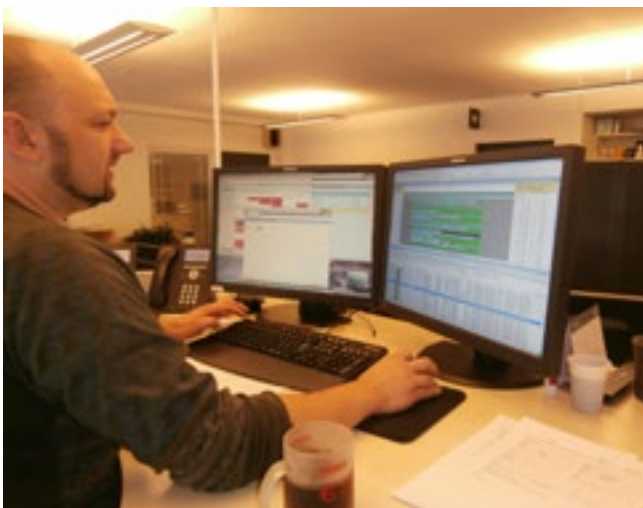
Vice president Michael Lichtenberg Crone explains, "If our customers place their orders by phone, web or email before 4 p.m. they can expect delivery the following day. We have hundreds of deliveries in Western Denmark every day. Our product range is massive and the great capacity diversification adds to the planning challenges as the trucks need to match the products."

Need for a new system

Route planning systems was not an unfamiliar concept to Lemvigh-Müller when they were introduced to AMCS' Intelligent Optimisation solution suite. In fact, they had already had a planning system from another supplier for quite a while. Nevertheless, the system was a more traditional planning system and Lemvigh-Müller wanted a new, more efficient, system with incremental and real-time planning capabilities.

Michael Lichtenberg Crone continues, "The quality of the automatic planning in our previous system somehow seemed similar to the result one would get when planning with postal code sorting. Therefore, the routes which the system supplied us with needed a lot of manual corrections and consequently we experienced a large dependence on key personnel."

When purchasing AMCS' solution, Lemvigh-Müller had clear ambitions and high expectations. Michael Lichtenberg Crone explains, "We wanted to improve our operational efficiency and we needed a new system to achieve this. We had the ambition of improving our capacity utilisation and achieving higher profitability. It was important to us to become less dependent on key personnel and future-proof our organisation IT-wise."



Less vulnerability

"Before we invested in AMCS' system, most of the information regarding customers, visit patterns, etc. was held by our planners. This dependence on key personnel made our organisation vulnerable", Michael Lichtenberg Crone recalls. "With AMCS' planning system we wanted to perform automatic planning to a much greater extent. Naturally, this ambition caused mixed reactions among planners due to fear of changes."

Michael Lichtenberg Crone continues, "Planning steel distribution is very complex so despite the fact that we now have a cutting-edge system, we will always have a need for skilled planners. Shapes and sizes vary tremendously and there are many rules regarding placement of products during distribution. In this respect, we work with so-called 'difficulty codes' which are assigned to the goods and shown in the system's Gantt chart. The system automatically pairs products and vehicles according to qualifications, and with these 'difficulty codes' the planners can easily double-check the system's planning and make necessary adjustments."

"Now our planners are more able to follow the matters through, and overtime has been reduced significantly. These factors, as well as the user-friendliness of the system and the good training and excellent support, helped convince the planners that the investment was a good idea", Michael Lichtenberg Crone says.

Numbers speak for themselves

When attaining the AMCS solution suite Lemvig-Müller had an objective of planning 75% of the orders fully automatically. This goal has been exceeded as they now plan 80-85% automatically.

Michael Lichtenberg Crone adds, "It was a process where we had to dismiss the way we used to plan and embrace what could look like "chaos planning" at first glance. Our drivers thought it was a crazy system in the beginning, but the numbers speak for themselves."

Major benefits from implementing the system:

- ▶ Number of vehicles has been reduced by 15%
- ▶ Average mileage per delivery has been reduced by 9.5%
- ▶ Capacity utilisation per vehicle has increased by 25%, and orders are also more evenly distributed on the vehicles
- ▶ Overtime among planners and drivers has been reduced considerably
- ▶ Better possibilities of informing customers of realistic delivery times

Michael Lichtenberg Crone concludes, "We decided to purchase AMCS' solution because we believe that AMCS's system is the best system in the market. AMCS and AMCS' planning system have not disappointed us – in fact, quite the opposite."

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We used to have a traditional route planning system but it did not optimise the routes well enough. Automatic planning with AMCS' planning system has resulted in greater capacity utilisation as well as a significant reduction in mileage per delivery and number of vehicles used per day.

