ROTHBAUM
CONSULTING ENGINEERS

WOLF

Network optimisation in distribution

Conception, modelling and calculation of a new network structure

An overview

In order to increase efficiency and reduce costs in the supply chain, Wolf GmbH's existing network structure was analysed. Based on this, an optimisation and simulation model was created using AnyLogistix. This model was used to develop and evaluate various scenarios and concepts for the future structure of the network. A business case and an implementation roadmap were drawn up for the best solution.

Wolf GmbH

- Leading system provider of heating, ventilation and solar technology based in Mainburg
- Part of the Ariston Group, a global specialist for heating systems
- 2,000 employees generate a turnover of over EUR 450 million
- Globally active with subsidiaries and partner companies in more than 50 countries

Services

- Conducting comprehensive data and process analyses using SQL and PowerBI
- Developing strategic guidelines and designing scenarios
- Creating a network optimisation and simulation model
- Creating a business case to calculate investments and savings

Results

- Comprehensive analysis of the current situation
- Creation of a network optimisation model with AnyLogistix
- Identification of 10 potential locations for a new distribution centre in the DACH region
- Calculation and comparison of various scenarios, taking into account transport, rental, warehousing and process costs
- Recommendation for opening a new distribution centre: 5-10% cost savings, 35% reduction in transport costs, return on investment of 2.7 years

Project description

Global distribution is handled from the main plant in Mainburg, supplemented by regional distribution centres in Europe and Asia. Shipping in the DACH region is handled entirely from the main plant. In order to increase efficiency and reduce costs, the existing network was to be analysed and new distribution concepts developed. Changes in both the outbound and inbound areas were to be taken into account. In addition, various levels of added value at the new location were to be analysed and a comparison made between in-house operations and the use of a logistics service provider.

Procedure

First, the Rothbaum consultants used comprehensive data and process analyses using SQL and PowerBI to gain an overview of the operations. Strategic guidelines were then developed and scenarios modelled to identify new locations and evaluate future network structures. The simulation model was further refined for the most promising solutions. A business case was then drawn up and the implementation summarised in an implementation roadmap.

Results

As part of the project, a comprehensive analysis of the current status was first carried out. A network optimisation model was then created using AnyLogistix software. With the help of this model and supporting market research, 10 potential locations for a new distribution centre in the DACH region were identified. Various scenarios were calculated and compared against each other, taking into account transport costs, rental costs, warehousing costs and process costs

The analysis showed that opening a new distribution centre was the best solution for the existing network. By realising the project, cost savings of 5-10% could be achieved and transport costs could be reduced by 35%. The return on investment (RoI) of the implementation is 2.7 years.

‘Thanks to Rothbaum Consulting's expertise in the field of network optimisation, we were able to quickly gain transparency about our distribution processes and significantly increase efficiency.’

Fabian Dietz,

Head of Supply Chain & Logistics
Wolf Brink Cluster

I look forward to your questions!

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