

Supply Chain Network Design

Case Study: Wholesale and mail order sector



The company specializing in B2B omnichannel retailing offers a broad product portfolio that is mainly distributed through E-Commerce. The wholesale and mail order company addresses the market through operational, customer-oriented divisions supported by various group functions.

Company data

- + **Industry:** Wholesale trade and mail order sector
- + **Employees:** + 2,500
- + **Sales:** + €1 billion (2021)

Software in use

- + **Used software:** PSIGlobal
- + **Type of project:** Network consolidation, Network study
- + **Implemented interfaces:** Various ERP systems, Warehouse management systems (Excel, CSV)

The challenge

Within the company, the various divisions and brands operate in attractive markets. These focus primarily on the sale of durable and price-stable equipment as well as specialty items for recurring needs to corporate customers in various industries and regions. Due to the different entities, heterogeneously grown logistics structures formed over time. In order to homogenize these structures, PSIGlobal was recommended to the company as a system for supply chain network design by one

of our partners. The challenge was to successfully master the major organizational and structural upheaval of the company. This upheaval included both the analysis of the existing data and network structure as well as the identification of possible synergy effects and resulting savings potential. The goal: The investigation of possible central warehouse structures for distribution in Europe and North America as well as the subsequent location optimization of these warehouse structures.



The solution

- + The projects to be realized required fast and uncomplicated data preparation. Initially, a single-level optimization of hub locations for the delivery to end-customers was carried out. Upon request of the customer, the European market was divided into different country groups. This was followed by a two-level location optimization using iterative calculation and scenario comparison, which determined the number and location of central warehouses in the network. Subsequently, a service level analysis based on transport times was run to ensure consistently high customer satisfaction
- + In this case study, the wide variety of data sources and amounts of data are worth highlighting. By considering a global logistics network, the subdivision into two separate subprojects made sense. Due to the geographical separation (Europe and North America), it was necessary to consider the respective criteria independently of each other and to actually carry out two different projects. As a consequence of the high number of entities as well as the geographical specificity of the project, a multitude of different data sources occurred, which in total required a high coordination effort
- + With PSIglobal, this challenge was successfully mastered. Due to the clean data preparation and visualization of the software system, transparency in the company increased significantly. The data evaluation and preparation provided an important basis for decision-making at group level for the new supply chain network design. In addition, various savings potentials were identified and initiated. By designing a new centralized network structure, we have succeeded in standardizing the logistics structure across the group, both for Europe and North America

Fact sheet

User

+ 1

Solution components

- + Data import
- + Analysis / Visualization
- + Extrapolation / Forecast
- + Tariff extrapolation
- + Location optimization
- + Allocation optimization

