

“Ab Ovo develops and implements integrated planning solution at Wallenius Wilhelmsen Logistics”

Global planning and space allocation solution for worldwide logistic service provider

The Company

Wallenius Wilhelmsen Logistics (WWL) is a leading independent provider of global factory-to-dealer transport solutions for the automotive, agricultural and construction equipment industry. WWL deploys around 70 modern environmentally adapted car carriers and Roll-on/Roll-off (RoRo) vessels, that service 20 trade routes to five continents. WWL transports 4.3 million vehicles annually: 2.3 million by sea and 2.0 million inland. The company processes up to 3 million vehicles a year through its 30 worldwide technical service centres. With offices throughout the Americas, Asia, Europe and Oceania, Wallenius Wilhelmsen Logistics combines global reach with expertise in local market requirements.



The Challenge

A keen balance between an optimal use of cargo space and high quality delivery towards customers, combined with flexibility towards changing market demands, is essential for WWL to deliver to its customers the competitive advantage they need. One of the key success factors in this respect is an optimised planning process for Ocean Transportation. This process used to be regionally fragmented and various planning tools (e.g. spread sheets, several in-house applications) were used. To fully optimise the planning of cargo on its vessels prior to departure, WWL was looking for a single globally integrated planning solution. The main goal of the desired solution is to optimise vessel utilisation, both from a space perspective and from a schedule perspective, taking into account forecasted & available cargo, cargo priority, associated revenue and performance against contract commitments. As an example of the complexity involved, a single vessel can carry a volume of 7.000 vehicles that comprise an average of 230 booking orders. Yet each voyage also carries complex project cargo such as rail cars, power generators, mining equipment and yachts; all with their own specific space requirements, contractual service level commitments and contribution margins.

The Solution

After a thorough selection process WWL selected the solution proposed by Ab Ovo based on Quintiq's Advanced Planning and Scheduling technology. The first step was to analyse all current planning process activities and specify how these should be organised in the future. After that the solution was modelled to the specific situation and goals of WWL and implemented in the various divisions and geographical locations.

With the integrated planning solution, the planners working in various parts of the world use the same up-to-date data, are able to execute automatic calculations and can run various scenarios to understand the impact of specific cargo (mix) and vessel (set up) changes. For a detailed insight in the supply chain, drill down analysis functionality is available.

Furthermore, the system takes various constraints into account such as allocation capacity, regulations and availability of cargo. These and other functionalities enable the various planning departments to make the best quality planning decisions possible. Finally, the solution contains operational and historical report functionality and simplifies internal and external communication due to a better visibility into the planning process and supply chain.

After the modelling and interactive development phase, the solution was implemented and integrated in the WWL IT landscape and interfaced with various applications such as the vessel schedule system, the forecasting system and the booking system, resulting in more efficiency and a complete overview of all relevant data.



The Results

The total project, from the development to the implementation of the solution, took just over one year; a huge achievement for a project of this size. Early in 2009 the system went live in the various regions (Europe, America, Asia, Oceania and the central offices in Oslo and Stockholm). For a smooth transition to working with the new solution, Ab Ovo supported WWL with a train-the-trainer approach. The functional maintenance of the solution will also be carried out by Ab Ovo.

The system has led to a significantly improved insight into the WWL supply chain, more transparency and better communication possibilities leading to an improved quality of the planning and a firm reduction of the Total Cost of Ownership.

Torbjorn Dimblad (VP Ocean Systems within WWL):

“The solution represents a significant step forward for our organization and we have come to appreciate the control and flexibility that the software offers us”

Ab Ovo

Ab Ovo is a fast growing IT solution provider with a strong presence in - among others - the Travel, Logistics and Industry segment. Ab Ovo has offices in the Netherlands (Rotterdam and Amsterdam) and Germany (Cologne). Our key areas of expertise include advanced planning, scheduling and optimization solutions and the development of critical IT solutions based on best-of-breed software or Ab Ovo's in house MDA development tool TET. Please visit www.ab-ovo.com for more information about our activities and relevant references.