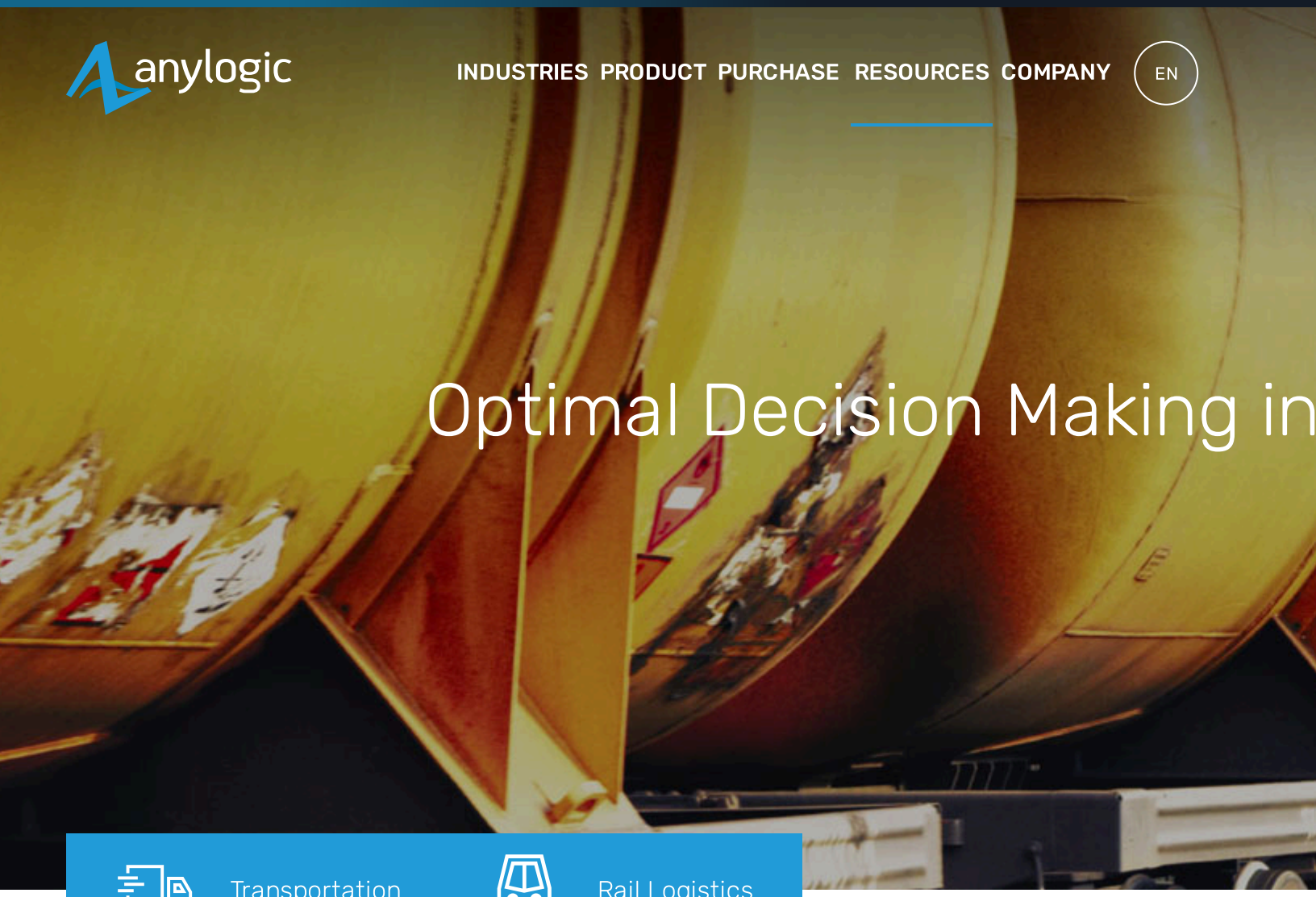


Optimal Decision Making in

Transportation Rail Logistics

anyLogistix optimization software success story.

Problem

One of the largest beer manufacturers in Eastern Europe faced a logistical challenge most manufacturing company's face, high transportation costs. The company's plan was to decrease distribution and transportation costs from the plant to suppliers

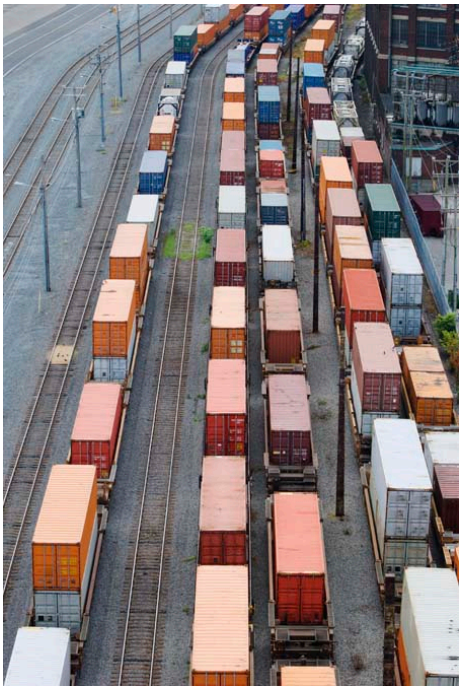
Traditional forecasting could not provide the beer manufacturer the required insight to make the most strategic decisions. Integrating the corporate ERP system with AnyLogic Transport Operations Manager (now part of anyLogistix) allows the company to consider all possible outcomes and make the most profitable decision.

The project goal was:

- Optimize the Company's own rail car and truck fleet usage and the usage of third-party carriers.
- Create a mid-term planning tool (next 60 days).
- Scale the solution for operational, short-term planning (next 10 days).

Solution

The model included in the decision support system simulated transportation of goods from the Company's manufacturing plants, through multiple distribution channels to suppliers.



The input data included:

- Sales forecasts provided by the client.
- Rail car fleet data:

The system considers the following:

- Station capacity for loading/unloading cars.
- Own and third-party fleet usage limitations due to tariffs and seasonality.
- Hot food container cars need to be heated from time to time on certain stations.
- Some clients can receive only deliveries by auto trucks.
- Delivery times.
- Loading/unloading times.
- State border crossing times.

The goal of the optimization experiments included delivery of goods to clients and the minimization of transportation costs.

Outcome

The decision support system allows the Company's logistics specialists to forecast transportation scenarios and analyze optimal variants. By letting the software assess risks, delivery times and costs, the Company is able to compare all possible outcomes. The Company's logistics department is enabled to develop ten and sixty day forecasting plans which lower transportation costs and ultimately lower the costs of goods.

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