

Business Case - Summary

Establishing a demand-driven supply chain at Ecolab



Client Challenge

Implementation of the JDA planning tool, establish a central tactical planning department and transition from a backward oriented to a forward oriented supply approach.

Our Solution

The gradual implementation of the JDA planning tool and custom made scheduled tool on the basis of existing processes, in order to ensure a stable planning tool before making the transition to a forward looking supply approach. During the implementations tactical planning processes have been integrated with plant planning processes.

Meanwhile, supply planning processes based on expected demand were developed and implemented to make the transition resulting in a tactical supply plan for the next 3-6 months as well as a strategic plan for the next 18 months.

Results

- ▶ Service level improvement in accordance with company targets
- ▶ Inventory level improvement in accordance with company targets
- ▶ Reduction of disposal
- ▶ Smoothened production plan

Services delivered by UC

- ▶ Tactical supply chain planning go live new built factory
- ▶ Hand over planning processes to new hires
- ▶ Finalizing further process improvement: Process master data sanity check

Review Customer

"Wouter took the challenge to deploy JDA in the WPS network by building a decision support spreadsheet based on history, forecast, SKU replenishment characteristics that "dictated" the decoupling point and a corresponding straight forward safety stock calculation. Based on KPI's collected weekly over a period of time this resulted in a decrease of our days on hand by 2 days, while improving the service level from 89.5 to 96.5 percent."

Yoeri Sanstra, Planning Manager at Ecolab.



In case of questions and/or remarks, please contact:

Wouter Eijkelkamp
E: wouter@ucplanning.nl
T: +31 6 37 40 99 73

Business Case

Establishing a demand-driven supply chain at Ecolab



Introduction

Ecolab is the leading provider of integrated water treatment and process improvement services, chemicals, and equipment programs for industrial and institutional applications. In 2010 Nalco, about to merge with Ecolab in 2011, decided to establish a Tactical Supply Chain Planning Team in Europe following the implementation of the JDA planning tool. The goal was to improve service levels to the customer, with optimized inventory levels and operating costs by establishing a forward looking supply approach. Wouter was hired as senior tactical planner and finalized the assignment as UC consultant.

Client Challenge

Before the implementation of JDA the central planning team consisted of 4 strategic planners who were each responsible for an area of strategic planning / region. Seven plants and several warehouses were planned by local planning teams. The planning was based on short term planning including re-order point inventory management. The client challenge was not only the implementation of JDA demand and supply planning, a custom-build finite scheduling tool and the installation of a tactical planning team. As well we had a challenge to make the transition to a forward looking supply approach at all planning levels for which planning processes based on expected demand had to be developed and implemented.

Our solution & results

To be able to find solutions to the different challenges the decision was made to deploy JDA gradually plant by plant based on existing processes to ensure a stable planning system before making the transition. During each deployment tactical planning processes were integrated with the plant planning processes and responsibilities defined. Meanwhile, the tactical planners developed the processes for a full supply plan based on expected demand.

First step: write a policy to decide the supply chain strategy per SKU ensuring a service level improvement to at least 97% SIFOT. Build a model for a monthly review of all SKU based on demand, sales patterns and product life cycle status and SKU's safety stocks based on forecast inaccuracy. Furthermore, build a model to review regularly MOQ and manufacturing batch sizes.

Second step: A capacity planning model was developed to discuss expected demand weekly with the plants and to solve potential bottle necks. Advantage: a higher service level and a lowering of operating costs due to a smoothed production plan.

Third step: inventory management based on expected demand for which an inventory structure was developed which classifies inventory in a certain group. Result: a full overview of inventory levels and associated signals to indicate excess and obsolete stock.

The final step was to establish a master data sanity check of all SKU based on product lifecycle management and all other planning parameters.

The aligned supply chain processes resulted in a stable tactical demand and supply planning for the next 6 months as well as a strategic plan for the next 18 months, where service level and inventory level targets are being accomplished, while operating costs have been reduced.