



ConsumerCo

ConsumerCo is a Fortune 500 global consumer products company that sells its products in more than 200 countries around the world.

“We had never been able to achieve the 99% service levels that Service Optimizer 99+ enabled, let alone with the 25% reduction in inventory. Service Optimizer 99+ let us re-mix the stock in 2 months...Needless to say, our finance people were ecstatic.”
-- Supply Chain Manager, ConsumerCo

Project & Objectives

In 2003, a segment of ConsumerCo's North America's operations became one of the first businesses in the world to implement a customer service-driven Inventory Optimisation system directly linked to SAP APO (also known as mySAP SCM).

... Day to Day

ConsumerCo's implementation features a new management process whereby customer service level policies are strategically set by collaboration between supply and demand chain personnel. An analytics engine in ToolsGroup's SO99+ then optimises the finished goods inventory mix and allocation around these policies. The system, which runs daily, identifies optimal safety stock and inventory targets for each SKU in the multi-echelon distribution network. It sends the targets to the SAP APO supply chain planning system for daily planning.

Promotional/specialty packaging, which is and increasing part of the consumer goods business is managed as well. To meet this important requirement, SO99+ optimises the inventory levels of the components across the multi-echelon network to drive specialty-packaging assembly at very high fill-rates.

SAP APO and Service Optimizer 99+ Working Together

At ConsumerCo, SAP APO concentrates on the flow of materials through the supply chain and the impact on supply chain resources – for example, how an inventory buffer should be replenished to bring inventory back up to predetermined safety stock levels. The job of calculating those safety stocks as part of an optimal inventory mix requires a different optimisation technology, which is the focus of ToolsGroup's SO99+. It employs stochastic optimisation techniques to calculate stock mix optimisation, complementing SAP APO's heuristic and linear programming-based techniques used to optimise supply chain flows and capacity utilisations.

Like many of its competitors, ConsumerCo is seeking to move closer to their customers and achieve service level excellence without skyrocketing inventories. Stock mix optimisation provided by SO99+ and SAP APO allows ConsumerCo to address this problem as part of an efficient Demand Driven Supply Network



(DDSN) solution. *SO99+* calculates the supply and demand variability, optimises inventory targets, and globally mixes the inventory, item by item at each location across the network.

In SAP APO, both Demand Planning (DP) and Supply Network Planning (SNP) are enhanced with complementary functionality from *SO99+*. The focus of both DP and SNP is *collaboration* across the supply chain. The objective is to reach agreement on a single set of numbers (forecasts, supply quantities etc.) that all parties can see and work towards. DP and SNP *use* safety stocks and other inventory parameters as inputs. ***SO99+* calculates** these quantities using stochastic techniques to model demand and supply variability and automatically generate a globally optimal inventory mix across many thousands SKU-locations.

Results & Benefits

Within three months, ConsumerCo reduced average finished goods inventory in the business segment by 25% and improved customer service levels (fill rates) to more than 99%, one of the best in their industry. The improvement was across the entire supply chain, not concentrated in one set of products or at one location. Benefits from improved service levels and less inventory are estimated at more than €1.43 Million annually.

SO99+ also reduced the ongoing manual intervention, resulting in a more stable supply chain. Supply chain planning business processes are under control. And when there is a problem, ConsumerCo is able to analyse, identify and implement a fix by adjusting system parameters, often all accomplished in a few hours, and without disrupting the factory and the supply chain. *SO99+* provides ConsumerCo a competitive advantage by giving them a kind of “thermostatic” control of their supply chain planning process.

Another key objective met was to achieve a “soft landing”, avoiding shock waves across the network as the inventory mix was adjusted to optimal levels. If not carefully managed, changing inventory targets create the risk of disrupting manufacturing or overloading warehouses. Instead, a gradual mix conversion was achieved by relaxing constraints over several months.

As a next step, ConsumerCo recently began implementing *SO99+* in a second division, after a strategic assessment showed a multi-million € savings potential in this division also. Finally, a global roll-out to all major business segments and geographies was begun in May 2005.