



NUCLEUS
RESEARCH

TOOLSGROUP OPTIMIZES INVENTORY TO INCREASE SERVICE LEVELS

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THE BOTTOM LINE

With the onset of disruptions across nearly all supply chains earlier this year, businesses are seeking technologies to bolster the integrity of their systems. ToolsGroup is well-positioned to address those concerns through its flagship supply chain planning solution: Service Optimizer 99+ (SO99+). ToolsGroup customers experience a variety of benefits, including five percent increases to service fulfillment and up to 20 percent stock level reductions. With SO99+, organizations are equipped with greater supply chain flexibility and agility to meet the rapidly changing demands of today's commercial landscape.

OVERVIEW

Before the economic disruption of COVID-19, executives and managers were already facing pressure from the increasing size and complexity of their supply chains. Even businesses that remained operational during this year's pandemic were blindsided by the fragility of their systems as links in their supply chains went down. With the economy in the early phases of reopening, companies need robust supply chain planning (SCP) technology that can accommodate the flux and uncertainty in demand and supply.

All companies plan to maintain their day-to-day operations and to ensure long-term commercial success. Now with the advancements in artificial intelligence (AI) and availability of information, businesses leveraging the latest SCP solutions can extend demand and supply planning out further and to a higher degree of accuracy than legacy software. However, the unpredictability of the market wrought by COVID-19 will test the efficacy of supply chain applications. Labor shortages and new operational regulations will severely impact supply output and delivery rates. Stay-at-home orders and shutdown of brick and mortar locations have accelerated the shift of sales to e-commerce. Vendors whose applications can adapt to the new commercial landscape to enable high service levels while accounting for financial impact will separate themselves from the pack.

TOOLSGROUP

ToolsGroup is a well-established SCP solutions vendor, specializing in demand forecasting and planning and inventory optimization. The vendor's flagship product, SO99+, comes equipped with tools that address an organization's SCP requirements from end-to-end for customers across verticals, including consumer goods, retail, food and beverage, manufacturing, distribution, and aftermarket parts. ToolsGroup specializes in inventory planning and optimization and offers demand planning and sensing, allocation and replenishment, sales and operations planning, and production planning capabilities.

SO99+ employs a probabilistic demand forecasting model, which accounts for natural variations as opposed to a deterministic approach that is unable to adjust to changes. Real-time adjustment capabilities are necessary for companies to remain competitive given the unprecedented demand and supply disruptions wrought by COVID-19. With an extensive range of demand sensing capabilities and incorporation of historical data, SO99+ enables organizations to predict demand and potential disruptions to a high degree of accuracy. The resulting setup leads to fewer forecasting errors streamlined inventories, which leads to lower operational costs and improved service levels.

KEY BENEFITS

Nucleus found that customers streamlined supply chain processes, whether they were leveraging using a few tools or the entirety of the ToolsGroup SCP solution platform. Key benefits include:

- **Improved supply chain resilience.** Demand sensing and analytic capabilities allow users to project the demand curve further into the future with more granular detail and greater accuracy. SO99+'s planning capabilities, such as simulations and modeling, allow users to optimize inventory and safety stocks and to formulate alternate plans in the event of exceptions to maintain service levels and avoid disruptions.
- **Reduced operational costs.** Accurate forecasting helps businesses select the right stock outputs to maximize revenue while keeping costs low. SO99+ contains business analytics and simulation functions to identify the best course of action to streamline the supply chain and improve efficiency at every stage.
- **Aligned business goals.** SO99+ enables organizations to make quick adjustments to their supply chain in real-time to meet business objectives and address priorities, such as expedited shipping, shipping incomplete orders, avoiding surplus, and anticipating demand increases. Modeling and simulation functions inform decision-making so managers can supply chain activities to meet financial and service requirements best.

CUSTOMER PROFILES

HEALTHCARE EQUIPMENT COMPANY

The healthcare company generates over \$13B in annual revenue, employs over 40 thousand people across 70 countries. As a large company with a diverse portfolio operating across multiple continents, the organization utilizes various cutting-edge supply chain management solutions to manage the storage and transportation of its products. The company typically uses SAP Advanced Planner and Optimizer (APO) and Blue Yonder for the bulk of its planning activities. Still, as part of its continuous supply chain improvement strategy, the company is constantly searching for solutions with leading functionality. Placing more emphasis on machine learning and analytics, the company considered implementing either Kinaxis' or ToolsGroup's SCP solutions. In 2018, the company selected ToolsGroup because of its robust demand sensing features and more attractive price point.

First implementing SO99+ in one of their central hubs in Europe, the company realized significant bottom-line value as the solution reduced operational costs, reduced lead times, and improved service levels. The company attributes these benefits to the software's reliability and efficacy in producing accurate forecasts, especially its consensus forecast capabilities enabling the company to incorporate data from its various international locations. As a result, the company achieved a 10 to 15 percent reduction in inventory holdings and increased service levels by as much as five percent.

Due to the success of SO99+, the company launched similar deployments in multiple European and North American locales in October 2019. Due to COVID-related delays, the company hopes to resume expanding the solution to its second-tier locations, including China and additional Central American countries. Through lessons learned from its deployments, the company cites data availability as the crux to a successful implementation. The company recommends that users first invest in data extraction and integration and establishing strict controls to ensure accuracy, as data management failures may lead to significant deployment delays or unexpected downtime.

A customer reported that SO99+ increased service levels by 5 percent within a year.

MANUFACTURING COMPANY

The manufacturing company is one of the United States' largest suppliers of stationary equipment, with factory locations situated across the country. As such, the company has stringent inventory requirements to manage nearly 500,000 tons of commodities every year, from raw materials to the warehouse. Previously using ToolsGroup SO99+ for inventory optimization and Logility Voyager for replenishment planning, the company was encountering inefficiencies in managing two supply chain solutions for inventory management. The manufacturing company had to decide between ToolsGroup and Logility to consolidate its SCP activities; ultimately, selecting ToolsGroup because its logistics team found the user interface (UI) more intuitive and workflows more streamlined.

Implementing SO99+ for both inventory optimization and replenishment planning in October 2019, the company expressed satisfaction with the solution's agility and reliability. The most valuable benefits experienced by the company was the ability to control forecast in terms of days and weeks as opposed to months, as well as optimize inventory across multiple products and locations. This allowed the company to pursue a broader range of business development opportunities as it was able to segment its products and improve service levels while lowering operational costs by reducing safety stock levels by nearly 20

percent. Utilizing additional functions of SO99+, users experienced faster calculation run-times and found optimization activities more consistent as processes were standardized. They also credit the intuitive UI for helping them better track and understand changes to their supply chain. The company has plans to consolidate more SCP functions under ToolsGroup, including demand forecasting within the next three years.