Lifecycle Management

THE IMPORTANCE OF LIFECYCLE MANAGEMENT FOR THE SERVICE SUPPLY CHAIN

Every product will have a lifecycle that planners need to understand in order to properly manage risk across the supply chain. The key lifecycle events of New Product Introduction (NPI) and End of Life (EOL) present unique challenges to the supply chain planning process - for NPI's, data is often tentative or missing; for EOL's, the forecast horizon is often many years rather than weeks. Proper lifecycle management is key for any supply chain organization but the challenges are particularly pronounced in the Service Supply Chain (SSC) sector.

Shifting from product fulfilment to service parts fulfilment shifts the focus from cost-aversion and customer acquisition to risk-aversion and customer retention. Service organizations bound to contractual obligations of rapid-response Service Level Agreements (SLAs) with penalties mean that a poorly managed NPI process is unacceptable. The challenge of planning the unique combination of low volume, high mix materials with complex part supersession requirements means the EOL process must be approached with an additional layer of scrutiny. Additionally, service lifecycle management for the after-market supply chain involves distribution to a diverse network of inventory locations ranging from distribution centers, fields sites, all the way down to a technician's trunk stock and it involves managing a complex sourcing structure that considers reverse logistics to repair defective material as well as multiple repair and purchase suppliers. A successful SSC organization is able to plan for these lifecycle events strategically, systematically, and seamlessly.

LIFECYCLE MANAGEMENT WITH BAXTERPROPHET

BaxterProphet, part of the BaxterPredict platform is focused on inventory planning and execution to optimize service parts management operations.

BaxterProphet's Lifecycle Management capabilities enable properly forecasted NPI timing and quantities as well as optimal EOL last-time-buy or lifetime buy suggestions.

New Product Introduction (NPI)

The goal of the NPI process is to have sufficient inventory in the replenishment network to support the growing installed base of a new material. Inventory needs to be brought into the network prior to the start date of contractual service commitments and as supply orders often have long lead times, the orders must be placed long before the contracts are finalized. At the beginning of a product's lifecycle, a service supply chain organization needs to predict the future demand requirements for materials with no demand history and few or no current contracts. BaxterProphet supports two primary forecasting methods for calculating initial demand forecasts for new materials:

- The Installed Base Demand method forecasts based on the projected installed base growth and begins with projections from internal engineering and marketing departments. The engineering department will provide a failure rate projection based on benchmarks of similar materials and data from internal testing and quality analysis while the marketing department provides information about the number of units that will be under service contracts in the initial months of a product's lifecycle. Engineering's failure rate projection is used to determine the demand rate and marketing's installed base projections will be added to BaxterProphet's forecast of the total installed base supported by a distribution center.

- The Similar Material method forecasts based on the actual demand history of a different material. By definition, a new material does not have any historical demand data so using a similar material with a similar function or product line as the new material simplifies the forecast creation process. Similar Material parameters allow the user to define which period of the similar material's demand history is copied as the new material's forecast, specify multipliers when there are volume differences between the new material and the similar material, and set smoothing parameters to even out the irregularity of the similar material's demand history by averaging the history of multiple months in calculating the new forecast.

These methods are then used by BaxterProphet to generate an initial forecast that triggers supply orders into the distribution center and calculates target stock levels at the field sites. Adoption of NPI best practices guarantees inventory availability at first customer ship without impacting service levels.

End of Life (EOL)

The End Of Life Planning (EOL) feature enables planners to manage materials at the end of their lifecycles. Statistical forecasts become less accurate as a material is phased out so BaxterProphet leverages material information to forecast requirements at the end of their supportable life to make excess scrap recommendations and calculate lifetime buy quantities for suppliers that are not accepting orders after a specific date.

BaxterProphet takes 3 key dates when calculating EOL requirements and then uses configurable fields to adjust how quickly a material goes end of life and how much of the material needs to be left for demand requirements after the EOL process has finished.

The End of Production Date is the last date on which the material is produced by the manufacturer, the End of Support Date is the last date on which the material is supported in the region, and the EOL Last Order Date is the date that the last order for purchased materials must be placed. These 3 date fields along with optional fields that allow the user define how many months from end of production date until the demand takes a noticeable downward trend or which percentage of current demand is expected at end of life are used to generate an EOL forecast. From here, BaxterProphet's algorithmic capabilities streamlines the planning process. BaxterProphet's comprehends chaining relationships to simplify the review the superior material availability, stockout alerts monitor the need for additional procurement before the End of Production date, and BaxterProphet plans for both new-buy and repair suppliers and for both good and defective inventory.

By following EOL best practice, forecasts can be shared with internal and external partners and purchase orders can be placed in a timely manner with enough quantity to meet lifetime needs.

LIFECYCLE MANAGEMENT EXPERTISE WITH BAXTER PLANNING

Baxter Planning has leveraged decades of service parts planning experience to design, identify, and measure 30 critical SSC best practice categories during each client's business review process.

This criteria is standardized in a Best Practice Scorecard and provides a foundation to deliver on our commitment to helping customers optimize and automate their service supply chains. The scorecard is organized by practice area and the benchmarks for the Lifecycle Management measure the customer's documentation and process for following NPI and EOL best practice. Baxter Planning advocates the adoption of best practices for repeatable NPI and EOL processes. during the implementation phase, and continues to monitor adoption of these best practices as part of our ongoing support.

For customers that are looking for additional support, Baxter's Planning as a Service offering can provide an extension to your planning organization to perform these responsibilities. Your designated Baxter Planning planners will perform a range of tactical and strategic initiatives including determining forecast trends for end of life materials, recommending lifetime buy purchase quantities, recommending excess scrap for materials nearing end of life, defining contingency plans and designing a process for a periodic review to test EOL sustainability, configuring BaxterProphet to generate forecast for new products, and documentation of customer's NPI and EOL processes.

Proper management of New Product Introduction and End of Life events will ensure that your supply chain organization is properly forecasting timing and quantities for NPIs and making optimal last time buy decisions for EOLs to plan for the right part, in the right place, at the right time, to improve first-time fix rates and increase customer satisfaction.

ABOUT BAXTER PLANNING

Baxter Planning is a global leader in Service Supply Chain software, delivering a Service Experience Advantage to the world's most innovative enterprises for over 30 years. The end-to-end BaxterPredict platform empowers organizations to optimize service parts planning, execution, and resolution, driving superior customer experiences, fostering long-term loyalty, and fueling business growth.

By combining purpose-built technology, award-winning AI, decades of practitioner expertise, and a commitment to true partnership, Baxter Planning consistently delivers industry-leading outcomes for its clients.

The company is headquartered in Austin, Texas, United States, with offices around the globe.

For more information, visit www.baxterplanning.com.