

# BaxterPredict

## TOTAL COST OPTIMIZATION

Balancing inventory budgets and service levels is a common challenge in the Service Supply Chain (SSC). Organizations have tighter expectations than ever before thanks to the “Amazon Effect” and service leaders must have spare parts in the appropriate places to meet their customers’ Service Level Agreements.

Supply chain and finance teams then struggle with a no-win tradeoff between service levels and inventory costs.

**Baxter Planning has seen this with numerous customers.**

The battle between meeting high customer expectations with budget realities can be unrelenting – if you don’t have the right solutions to manage them.

### Total Cost Optimization

Inventory planning solutions often begin the optimization process using an arbitrary service level target as the goal. These models are valuable for just-in-time manufacturing planning, not for the just-in-case requirements of the SSC.

Baxter Planning’s end-to-end platform, BaxterPredict, uses Total Cost Optimization to get customers to a Service Experience Advantage by balancing budget and inventory with service contract commitments.

Total Cost Optimization identifies the target stock level with the lowest total of inventory and stock-out costs.

## HOW DOES TOTAL COST OPTIMIZATION WORK?

This proprietary modeling takes qualitative and quantitative cost elements into account to determine optimal target stock levels that yield optimized service levels.

By including the cost of a stockout in the calculation, the system achieves levels of optimization only possible with a solution designed for Service Parts Planning.

Stockout costs occur when the required part is not available at the ideal location.

Stockout costs are derived from factors that include, but are not limited to:

- Customer importance
- Downtime costs
- Service contract penalties
- Expedited shipping fees
- Lost technician productivity
- Lost profits
- Decreased Net Promoter Score (NPS)

With Total Cost Optimization, the optimal target stock level is the one with the lowest total costs of combined inventory and stockout costs.

## TOTAL COST OPTIMIZATION IDENTIFIES THE TARGET STOCK LEVEL WITH THE LOWEST TOTAL INVENTORY AND STOCK-OUT COSTS.

### INVENTORY COSTS =

part cost +  
carrying cost

### STOCKOUT COSTS =

downtime + expedited  
shipping + lost productivity +  
contract penalties + lost profit  
+ others



# Optimized Fill Rate

## LOGISTICS NETWORK OPTIMIZATION

A key component of Total Cost Optimization is the ability to differentiate between standard fill rate and optimized fill rate.

The standard fill rate metrics commonly used measure only whether the inventory to meet demand is anywhere in the service provider's supply chain, ignoring the SSC costs previously mentioned.

Though the reported service level metric may be accurate, the cost of providing this level of service typically includes hidden expenses that affect your bottom line significantly.

Optimized fill rate is the SSC's ability to not only fill the demand, but to fill it on time from the most efficient site in network, saving on shipping costs or penalty fees and keeping employees from scrambling.

BaxterPredict determines the actual optimized fill rate using Total Cost Optimization to enable continuous improvement.

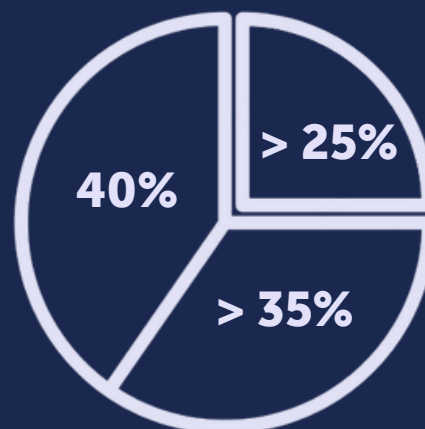
When demand is not filled from the optimal (planned) site, the platform's planning capability provides a root cause analysis and determines if the "miss" was a result of a supplier problem, transportation delays, data issues, or a variety of other potential problems.

This automated analysis of non-optimal fulfillment allows end users and leaders to identify key issues and implement corrective action.

## RESULTS

Adopting Total Cost Optimization as provided by the BaxterPredict platform shows significant results.

- **REDUCE CARRYING COSTS BY > 35%**
- **INCREASE FIRST-TIME FIX RATES > 25%**
- **BOOST TEAM PRODUCTIVITY BY 40%**



## 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](http://www.baxterplanning.com).