By adopting techniques like dynamic safety stock, and reviewing replenishment order sizes, you can achieve the optimum inventory levels while still maintaining the desired service levels.

Capgemini’s Inventory Optimization analytics helps you identify and monitor key indicators like stock churn, inventory costs and obsolescence for your inventory across the value chain.

**Challenges in Inventory Optimization**

Inadequate reviews of inventory levels, safety stock and replenishment policies lead to recurrent stock-outs or excess inventory across the supply chain. Organizations choose to keep inventory levels high as a buffer against uncertainties, resulting in inefficiencies and high working capital requirements.
Our Approach
We start by understanding your transaction data, replenishment and inventory policies.

We understand the business footprint and validate key business figures.

We optimize inventory levels across locations by setting the right safety stock levels for both finished goods and raw materials. This improves downstream service levels and reduces loss of sales.

As part of our stock optimization analysis, we look into slow-moving and obsolete inventory, ensuring better planning and allocation. Reducing inventory levels also frees up capital that can be re-deployed.

We help perform the analysis for optimal lot sizes. We support supplier rationalization analysis and also evaluate vendor-managed inventory. Periodic reviews of supplier policies help reduce raw material inventory. Ongoing analysis and customized KPI dashboard reports improve cross-functional visibility and reduce impulsive ordering.

In sum, our analysis enables you to identify opportunities to reduce overall inventory costs.

Key Deliverables
Capgemini’s supply chain analytics provides you with all the analysis and insights you need for end-to-end inventory optimization:

- Reduce inventory and release cash
- Improve fill rates and deliver growth
- Eliminate wastages and improve margins
Success Story
Opportunity Identified for Rationalizing Inventory by CPG Major

The world’s number one CPG company identified an opportunity to rationalize its product portfolio for a particular product category. Inventory analysis showed that by doing so, it could reduce both planning complexity and inventory levels.

Solution
Capgemini’s business analytics service team identified slow moving and non-performing SKUs based on volumes, margins and inventory days of cover. The solution encompassed the below activities:

- Identification of slow moving SKUs in the existing portfolio and the days of cover
- Analysis of gross margins and net sales for all the SKUs
- Rationalizing 60% of the SKUs to simplify planning processes.

ABC Analysis of SKUs

![ABC Analysis of SKUs chart]

Success Story
Potential Savings of €2.7M from Better Use of Point of Sale (PoS) Assets

A leading CPG company was looking for cost savings from making better capex allocation decisions about POS assets. It was spending 10% of sales on such assets, and close to 30% of them was non-performing with poor inventory movement. The company faced the challenge of reducing mismatches in asset levels and increasing POS throughput.

Solution
Capgemini’s business analytics services team analyzed large volumes of transactional data for a specific country at the customer level. POSs and their assets were categorized according to asset age, throughput performance and profitability. We developed various scenarios for asset redeployment and used them to assess savings potential, applying filters based on asset age, payback period, and profitability and throughput levels. We discussed the findings with stakeholders before agreeing on the savings were realistically achievable.

Outcome
In the country under analysis, our evaluation model identified €2.7m savings from redeploying POSs and thereby avoiding capex on new assets. Additional savings could be achieved by increasing capacity and optimizing order sizes for those POSs that were handling high volumes and high order frequency. By doing this, cost to serve could be brought down by 4-8%, and replenishment visits reduced by 17% overall.

Our model was flexible and it was used for scenario evaluation in at least two other markets in the pilot phase, helping to identify similar capex savings.

Our Analytical Tools and Capabilities

Our statistical analysis makes use of a range of quantitative and exploratory techniques.

Predictive modeling techniques help us deliver dynamic models to forecast product demand.

We also use customer optimization tools to model complex operational problems that may have multiple constraints, and find an appropriate strategy.

A user-friendly, in-house proprietary supply chain simulation tool helps train operations personnel in supply chain concepts and their business implications.
The Capgemini Experience
The team has a strong analytical background with specialization in disciplines of management, engineering and statistics. Their experience includes CPG and retail, consulting, research and supply chain.

Our clients get lasting value because we engage directly and meaningfully with stakeholders at each level of the enterprise – from boardroom to shop floor and warehouse.

Our Capabilities in Supply Chain Analytics

Plan
- Demand Forecasting
- Plan Compliance Analytics
- SKU Rationalization
- Capacity vs Demand Analytics

Source
- Supplier Risk Assessment
- Commodities Research
- Spend Analysis

Make
- Optimising Production Plans
- Asset Utilization Analytics
- Cost to Manufacture

Store
- Resource Usage Analytics
- Inventory Optimization
- Inventory Wastages Analytics

Deliver
- Network Optimization
- Cost to Serve
- Logistics Analysis
- Order Fill Analysis
- Sales Analysis

For more details contact:
Terry Sandiford
terence.sandiford@capgemini.com