

Driving **95%** Forecast Accuracy in Spare Parts Planning with Anaplan: A Global Appliances Manufacturer's GCC Success Story



Client Overview

The client is the **Global Capability Center (GCC) of a leading global appliances manufacturer**, playing a pivotal role in driving supply chain planning, after-sales service operations, and inventory optimization across multiple geographies.

With a vast network of service centers, warehouses, and suppliers, the organization manages thousands of spare part SKUs characterized by highly variable and long-tail demand patterns.

As operations scaled in complexity, the need for a more **agile and intelligent spare parts planning ecosystem** became critical. However, the existing planning approach struggled to keep pace—resulting in suboptimal service levels, inventory imbalances, and limited visibility across the planning landscape.

To address these challenges, the client partnered with **Polestar Analytics** to implement a connected, data-driven spare parts planning solution on **Anaplan**—bringing enhanced **forecast accuracy, inventory optimization, and end-to-end visibility** across the supply chain.



Key Challenges

As the client expanded its planning scope across regions and product lines, several structural and operational challenges began to surface.

1 Volatile and Long-Tail Demand

Unpredictable demand patterns driven by irregular repair cycles, warranty claims, and recalls made forecasting highly unreliable and inconsistent.

1. Frequent demand spikes and drops across SKUs
2. Low forecast accuracy for long-tail items
3. Reactive planning impacting service levels

2 Complex Product-to-Spare Mapping

Managing multiple spare parts per product along with constantly evolving Bills of Materials (BOMs) made demand translation and planning highly complex.

1. Difficulty in linking main SKU demand to spare parts
2. Frequent BOM changes disrupting planning accuracy
3. High dependency on manual interventions

3 Inventory Imbalance and Obsolescence

Wide variability in demand made standard inventory policies ineffective, leading to overstocking of slow-moving parts and increased risk of obsolescence.

1. Excess inventory locked in low-demand SKUs
2. Increased write-offs due to obsolete parts
3. Inefficient working capital utilization

4 Logistics and Distribution Complexity

Diverse supplier lead times and multi-warehouse networks created challenges in stock positioning and timely fulfillment.

1. Inefficient stock distribution across locations
2. Delayed replenishment due to lead time variability
3. Higher dependency on premium freight to meet demand



Solutions Implemented

Polestar Analytics designed and deployed a connected planning solution on **Anaplan** that brought together demand, supply, inventory data, and product-part relationships into a unified planning framework.

Main-to-Spare Demand Linking

Established a structured linkage between finished goods and spare parts to accurately translate product demand into spare parts requirements.

- Defined allocation percentages across SKUs
- Incorporated replacement and consumption logic
- Enabled demand propagation from main SKUs to spares
- Improved accuracy of demand signals for planning

This enabled more reliable forecasting by directly aligning spare parts demand with product sales patterns.

Granular Visibility and SKU-Level Forecasting

Enabled end-to-end visibility across demand, inventory, and warehouse attributes to support more precise and localized planning.

- Captured SKU-level demand and inventory data
- Integrated warehouse and regional attributes
- Enabled location-wise forecasting capabilities
- Improved transparency across planning dimensions

This provided planners with deeper insights, driving more informed and responsive decision-making.

Adaptive Inventory Optimization

Implemented dynamic inventory policies tailored to demand variability, part criticality, and lead times to balance cost and service.

- Deployed SKU-level Min/Max thresholds
- Configured dynamic safety stock calculations
- Incorporated variability and lead time factors
- Aligned inventory policies with service goals

This ensured optimal stock levels while minimizing excess and stockouts.

Automated Planning and Exception Management

Introduced automation to streamline planning processes and proactively manage inventory risks.

- Generated automated order recommendations
- Flagged slow-moving and excess inventory
- Identified phased-out and obsolete parts
- Enabled exception-based planning workflows

This reduced manual effort and improved control over inventory health and planning efficiency.

Business Impact

+18%
improvement in
service levels,

1

ensuring higher spare parts
availability and better
customer experience

15% reduction in
obsolete
inventory,

2

unlocking working capital
and reducing write-offs

45% faster
planning cycles,

3

enabling quicker and more
responsive decision-
making

12% reduction in
premium freight
costs,

4

driven by improved
planning accuracy and
fewer last-minute
shipments

95% forecast
accuracy,

5

significantly enhancing
demand predictability for
spare parts