



Sales, Logistics Operations Planning with Execution (SLOPE)

Case: Customer Care & Aftermarket Parts & Service

The Situation

- Large global automotive OEM
- Customer Care & Aftermarket Parts & Service.
- Forecasting reviews were labor-intensive with adjustments based on visual cues and fits.
- Rate of forecasting error, plus voluminous SKU count, made it difficult to review anything but a focused group of high-volume parts, with little to no hours dedicated to long tail low volume parts which made up the majority of part count.

Critical Business Issues

- Customer forecast accuracy challenges led to consistent under forecasting month over month
- Customer was leaving significant 'crown jewel parts' revenue on the table due to unavailability at retailer and dealer shelves.
- Customer needed to capture more of this unmet high margin revenue.

Capability – Advanced Demand Forecasting Built into Logistics Planning

- In an inbound, plus aftermarket care, materials supply situation much of the demand is driven by an in place legacy MRP system.
- With customer care and aftermarket there are additional demand streams for SKUs, representing attachments, replacement parts, and other aftermarket products.
- More advanced, sophisticated, forecasting capabilities using a variety of advanced analytics (including Machine Learning and Deep Learning) were required to help address critical business issues.
- Additionally, there was a need to take all independent demand streams and create a dependent forward looking multiple-month logistics forecast for trucks, containers, and lanes.
- Forward-looking logistics network capacity visibility was extremely valuable to service providers and carriers in more optimally managing their business on behalf of the OEM customer.
- Furthermore, when orders from different demand streams changed, customer logistics team could immediately see the changes reflected in the logistics forecast.



aThingz Solution

- aThingz Transportation Optimization and Management (ATOM) Demand Forecasting microservices.
- ATOM Demand Forecasting uses deep learning, machine learning and advanced analytics.
- Solution manages on an average of 4,000+ “golden” parts daily.
- Provided the business with SKU-level forecast adjustment improvements and values for better visibility to network inventory.
- Provided forecast value adjustment recommendations at same SKU level that were used for change approval in addition to feeding business applications used for adjusting forecasts and market intelligence.
- Provided more accurate forecast recommendations via more automated and accurate methods.

aThingz Solution Business Impacts

- Improved demand forecast accuracy by 25% to 95%+ accuracy over a continuous 12-month horizon.
- Increased operational efficiency by reducing/eliminating manual adjustment process.
- Established direct data integration to expedite daily forecast adjustment process.
- Enabled the ingestion of different supporting datasets for continuous improvement and automated adjustment of forecast.
- Provided sortable, plus explainable, forecast adjustment insights and recommendations.
- Provide Metrics related to forecast accuracy, bias, cost saving, inventory visibility
- Enabled large dataset processing with flexible forecast time horizons (i.e., 6, 12, 18, 24 months)
- Standardized, cleansed, and established a clean copy of master data for decision accuracy improvement.
- Generated millions of dollars of increased revenue.