

**END-TO-END PLANNING**FOR QUICK SERVING RESTAURANT





### THE CLIENT

- A large Quick Service Restaurant (QSR), with operations in India since 1996.
- Known in the industry for its cutting-edge supply chain solutions
  deployed across to ensure food and related products are supplied to all its stores/outlet across India - on time and in full.



450 stores across 60 cities and towns in India.



4 Distribution Centres (DCs) present at Navi Mumbai, Bangalore, Noida and Kolkata.



700+ SKUs of food, paper & packaging, uniforms, promotion and maintenance & repairs items are served from these 4 DCs.

# THE CHALLENGES



Order fulfilment from distribution centres hovered around 79% Order In full.



Inventories at DC were at all time high at 13-14 days, standing 66% higher than desired Inventory Levels.



Service levels were lower and occupancy was higher at DC.



Freshness Index and shelf life available to stores were lower than desired level backed by the expiries in slow moving products.



Right mix of inventory was not planned and demand forecast was highly influenced by the events during the same period last year.



Ordering was based on manual forecasting methods – past sales trends, promotions planned and stores managers' expectations of demand from their stores.

# THE SOLUTION

Diagnostics with root cause analysis, followed by deployment of Demand Planning Solution

Frequency & Volume

Two dimensional segregation (frequency and volume), trend and seasonality of SKU for clear identification of runners, repeaters and strangers.

Confidence Levels

Three years historical demand flow was used to build confidence levels in demand plan.

Statistical & ML Model

Each SKU was accompanied by suitable statistical and machine learning model (from exponential to box - Jenkins and ARIMA).

Demand Forecast

Bottom up approach to build the demand forecast and horizon was fixed at 16 weeks - 4 weeks firm and 12 weeks rolling.

Weekly MRP 7

Deployed the process of Weekly MRP (Material Requirement Planning) to ensure suppliers were fed with right Purchase Orders at suppliers' lead time.

Demand Visibility

Demand visibility was shared across the supply chain with partners and suppliers, enabling them to plan raw materials and align to production schedules.

# **RESULTS**

Improved product flow, increased efficiency, enhanced management capability



#### **Improved Product Flow**

- The QSR chain immediately realized increased volume movement between DC and stores through increased confidence in supply reliability and supply dependence.
- Opportunity sales component improved significantly.



#### **Increased efficiency**

- Demand Forecast Accuracy improved to 94% with +- 2% bias across the portfolio
- DC holding inventory turnover ratio improved from 28 to 41 - indicating improved net available shelf life for stores for all products delivered
- Overall inventory days reduced by 66% well within desired levels of 9 days
- Expiries in DC became zero
- Overall resource optimization by reduced RM/WIP/FG at suppliers. Reduced occupancy at DC and improved reliability lead to reduced inventory at stores further enabling the release of working capital across the chain



#### **Enhanced management**

Reduced hours of manual work

# **TOTAL VALUE CHAIN**

Services that deliver the future

### **Supply Chain Planning**

• Predictive solutions for supply chain management.

# **Supply Chain Management (3PL)**

Prime partner for warehousing, logistics and value added services.

### **Operations Centre**

Increase efficiency through operations expertise and control.

#### **Unit Management**

Enhance unit performance and profitability - managed in real-time.

#### **Automation**

Improve execution quality through automation.

More about what we do at www.totalvaluechain.com