Regional Utilization System

One of India's top ethnic wear brands was facing challenges in **reducing order mismatch** due to wrong **placement of stocks** for multi warehousing inventory dispatches

What is Regional Utilization?

IRIS RU (Regional Utilization) is a novel solution to **intelligently split inventory** across **multiple** warehouses. This improves regional utilization (RU) of brands by computing **optimal warehouse allocations** for fashion inventory. Procured inventory must be optimally allocated to warehouses **in proportion to the regional demand** around the warehouse. This will ensure :

Demand is **fulfilled by the nearest** warehouse thereby minimizing the delivery times

Significant **savings** on logistic **costs**

Higher regional utilization, resulting in **better visibility** & **higher conversion** on Marketplaces

Lower rate of **returns**

These are **key metrics** to drive **profitability** and customer **experience** respectively. Warehouses have capacity constraints and allocations must **minimize inter warehouse redistribution** cost of the inventory. This leads to maximum **Regional Utilization** (RU).

Challenges

- Facing mismatch in inventory allocation as high as 40-50% for a 2 warehouse configuration (Bangalore and Delhi warehouse)
- Significantly **high logistic costs** with most orders being billed on **national costs** than local/regional costs
- **Delayed delivery** times
- **Stock-outs** of regional demand in the **local warehouses**
- **Low depth inventory** making distribution difficult
- New style & cut size inventory has **no historical data** to bank on. **No intelligent mechanism** to distribute this inventory with **scarce data**
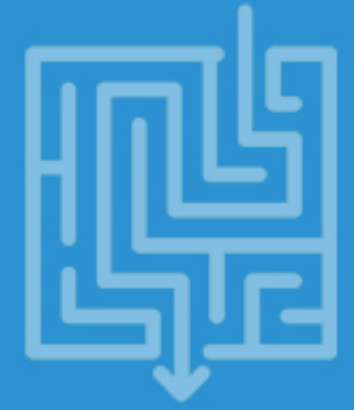
Solution

Automated distribution of inventory across regional warehouses based on:

Customer Pincode level analysis (location- based analytics)

Days on Hand (cover)

Sales Contribution

Recency, Events & Seasonality

Rate of Sale

Inventory Contribution

New Style distribution is based on attribute group performance of similar sister styles to gauge its demand

With cutoffs for Number of pieces sold, Warehouse capacity, Daily Inwards/ Outwards warehouse limits

Results

70%

reduction in **order mismatch** problem, thereby increasing **regional fulfillment** by **30%** (from 52% to 82%)

Increase in sales due to better visibility on marketplaces and better **customer satisfaction** scores (CSAT/NPS)

20K USD

savings on logistics cost of 150,000 USD in just 60 days of implementing Iris RU. Improved **EBIT** by ~1%

All the intelligent calculations were done by a click of a button in **less than 5 minutes**

70%

air shipments were converted to **surface** shipments

A significant **uptick** in the **delivery** times