CASE STUDY

Distributed Warehouse Inventory Optimization Module for accurate inventory distribution across stores and warehouses

Summary

One of the leading British denim wear brands with 750+ retail outlets, selling on its own website, and 6 major marketplaces, was experiencing excess stock in its warehouses and stores due to inaccurate inventory distribution. This led to a loss in sales opportunities at some locations and a blockage of working capital at others.

The brand was looking for a solution to help them analyze local demand and smartly distribute/ re-distribute inventory across their network of warehouses and stores, to facilitate faster order fulfillment at a lower logistics cost.

Objectives

Optimally distribute inventory across a multi-store and multi-warehouse network to avoid inventory understocking and overstocking.

Maximize revenue by identifying core styles for each store location & ensure accurate stock availability at all times.

Automate inventory allocation process to eliminate human decision-making errors.

Solutions

Increff Distributed Warehouse Inventory Optimization Module was implemented to build supply chain resilience and improve stock distribution with demand-wise allocation. Using in-built algorithms, the tool was able to analyze true customer demand, map at the Pin code level, and suggest intelligent inventory split across the brand's network of managed warehouses and stores. Placing the right stock in the required quantity, at the right location, closer to the customers enabled faster fulfillment. It also facilitated fresh season allocation and mid-season replenishments/replacements with inventory redistribution through inter-store transfers, to increase revenue, reduce inventory holding and optimize sales.

Some notable features of Increff Distributed Warehouse Inventory Optimization Module include:

Considering business costraints like store capacity, store revenue targets, and days of stock cover it can hold, when devising an ideal strategy.

ROS (Rate of Sale) based Dynamic Distribution at store and SKU-level by **correcting** unavailability, liquidation, brokenness & over/under-stocking scenarios.

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

No clustering of stores, considering each store has its unique DNA, predicts the store-wise demand based on historical performance.

Allocating inventory considering essential demand influencing parameters like **recency, seasonality & festivities** and **store stock, open orders & GIT (Goods in Transit).**

Creating intelligent inputs by consuming only raw data and uniquely tailoring size ratios for every store-product group. Stock cover that needs to be maintained for every SKU is system created input, rather than manual user input norms.

Allocating inventory based on **2D Store Style ranking** such that every piece is optimized to its maximum potential.

Business Benefits

Implementing Increff Distributed Warehouse Inventory Optimization Module resulted in:

▶ **18%** reduction in working capital by reducing inventory holdings.

▶ **12%** reduction in stock broken-ness to improve inventory health leading to higher conversions.

▶ **80%** saving in working hours spent on stock allocation with end-to-end automation.

▶ **22%** increase in revenue by eliminating sales opportunity loss and stocking the right core styles for each location.

About Increff

Increff enables automation for resilient retailing by helping retail and e-commerce brands to adapt to ever-changing consumer expectations through best-in-class merchandise planning, allocation, and warehousing solutions.

Our Clients

PUMA

Raymond

Levi's®

adidas®

MANGO

Pepe Jeans LONDON

Calvin Klein

celio*

lenskart

AJIO.COM

Myntra

BLACKBERRYS