

Replenishment Optimization

Organization Name: Hindustan Unilever

Overview:

Sense Demand at Distributor level and basis this sensing replenish the distributor so that distributor servicing to the retailer is maximum at minimum investment in inventory

Current Challenges:

Unilever runs distributor system on the traditional supply chain replenishment principle of Norms (Safety Stock + Cycle stock).

Unilever has complete visibility of stocks at distributor and basis the norms decided at each distributor we keep on replenishing the distributor. However this traditional model has shortcomings

The norms are based on the forecast which is only accurate in the range of 50%. Also the forecast is made for a month and is static for the month and does take into account mid-month changes. It also does not take into account interplay between SKUs. For e.g. If one SKU is out of stock there is a likelihood the other SKU will sell more

All this results either understocking resulting in sales loss or overstocking resulting in expiry products at distributor

Business Requirements:

1. Algorithm which can sense demand basis the incoming order from market to distributor (Order data is available)
2. Ability to interlink demand relations between to SKU
3. Take current realities of supply chain in to account and establish impact on demand

Refer: https://en.wikipedia.org/wiki/Demand_sensing

<https://logisticsviewpoints.com/2009/05/04/demand-management-vs-demand-sensing/>