

#021: Multi-Channel Order Management & Replenishment

When demand comes from multiple independent (sometimes they can affect each other) sources and fulfilled from the same inventory, it constitutes a multi-channel system. Those demand channels have different priority profiles.

Cases

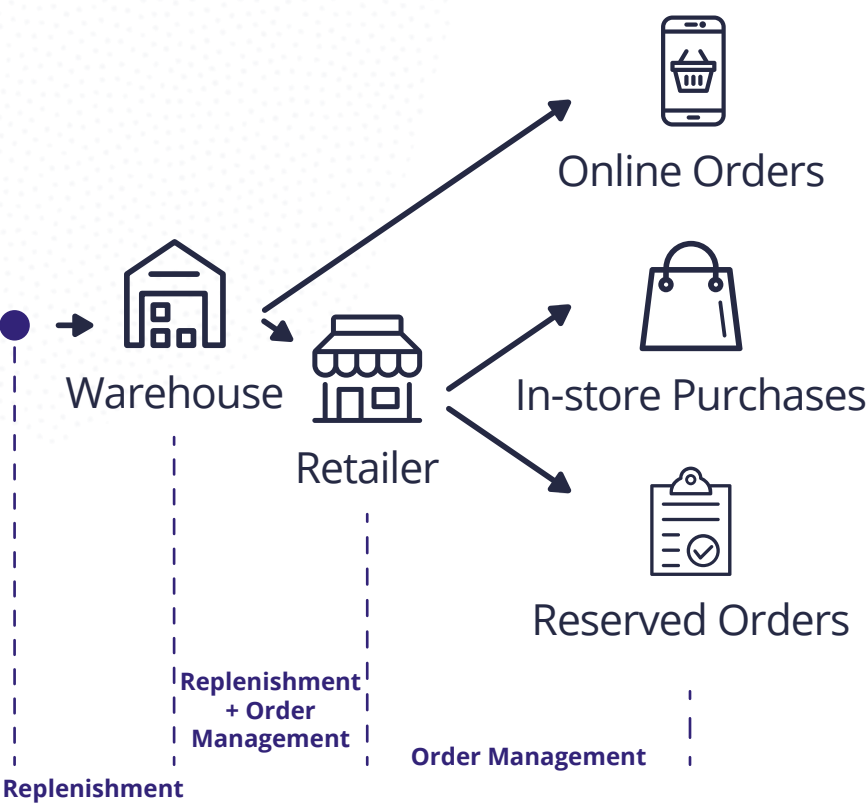
1

A **single-echelon supply chain** where, the retailer receives regular demand (in-store purchases), reserved orders from some clients (usually B2B) and online orders as well.



2

A **two-echelon supply chain** where, the retailer fulfills in-store purchases and reserved orders, and the warehouse fulfills the retailer orders and online orders.



Method

Order Management (Fulfillment)

In case of multiple demand sources, inventory is allotted based on a priority profile. Inventory pooling effect can be exploited to have better cost performance as well as to improve service level.

Replenishment

Demand from various sources are combined. Instead of independent ordering at the central warehouse, a centralized system benefits from economies of scale. Also, supplier constraints such as minimum order quantity or container size, can be fulfilled more efficiently with a centralized approach.

Impact

↓ 8.2%

Reduction in system cost
(holding, backorder, and transportation)