# #054 : Inventory Repositioning/Rationalization

When there is an inventory imbalance in the supply chain, i.e. some entities have excess stock and some are stock deficient, inventory rationalization can be used to reposition the excess stock into the stock deficient entities.

Cost Implications

Costs involved in doing so are transportation cost, inventory holding cost and salvage cost.

The objective of inventory rationalization is to find the transfer quantities between each entity so that the total profit is maximized.
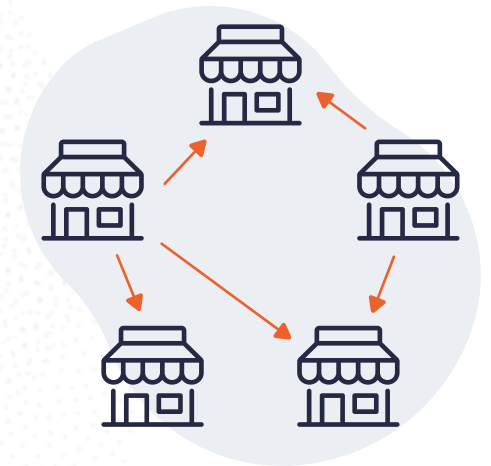
Constraints

1. Truck capacity constraints
2. Entity (store) capacity constraint
3. Max. stock constraint (as a function of demand). It is not advisable to have overstock everywhere.

Other Option

Instead of inventory rationalization, the excess stock can also be sold off at a cheaper price which is called salvage value. Salvage cost is the loss incurred with selling the inventory at a cheaper price.

Benefits

Lower obsolescence cost

Temporary reduction in buying cost

Gradual lowering of blocked capital

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