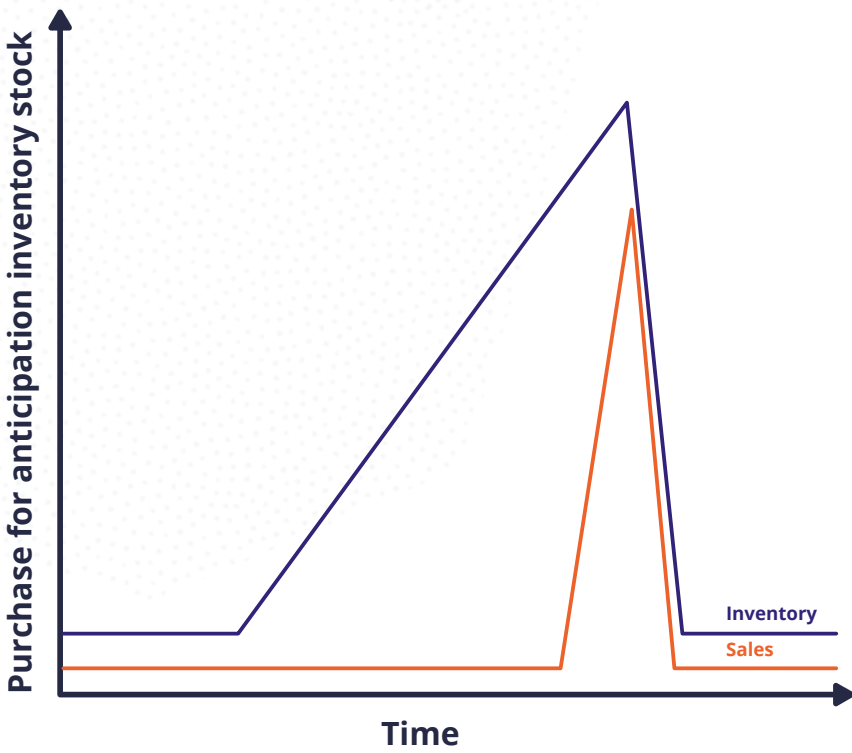
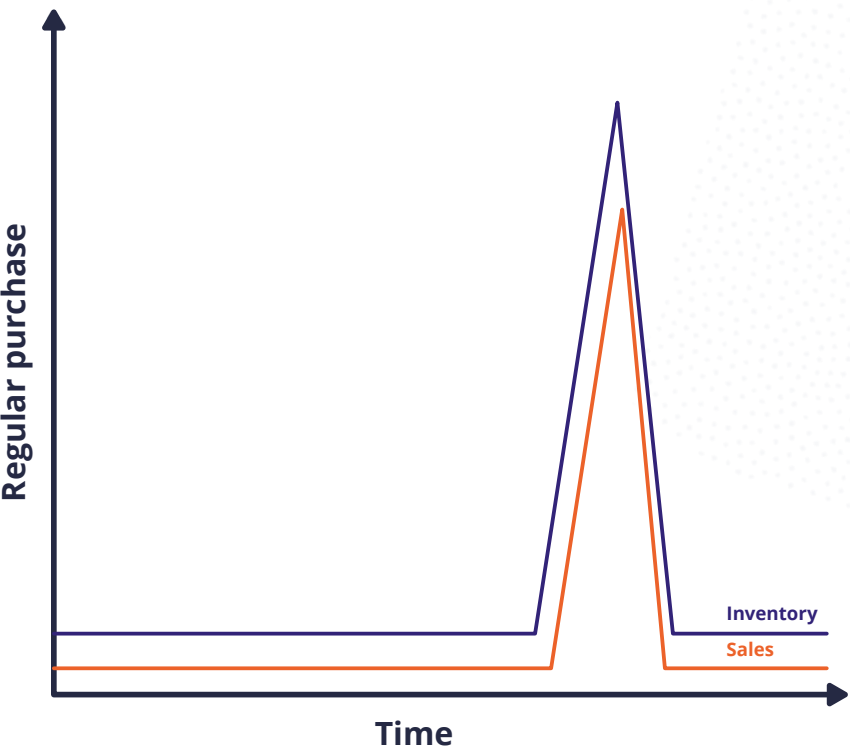


Demand is seldom stationary. Seasonal events such as Christmas, Halloween, etc. see sudden increase in demand. Retailers can opt for building the required inventory months in advance. This inventory is called anticipation inventory stock. It is also called inventory “smoothing”.



Justification

The following reasons may make smoothing necessary

1

Capacity limits at the supplier

2

Logistical constraints

3

Material handling constraints at the retailer

4

Economic reasons

Need for Optimization

Generally, inventory smoothing is carried out primarily for supplier capacity constraints, logistical constraints and material handling constraints, etc. However economic reasons are usually overlooked.

In the absence of first three reasons, economic justification must be there for inventory smoothing.

In there presence also, a cost optimization is necessary to find the optimal points. Smoothing might incur higher inventory cost.

On the other hand, apart from satisfying the constraints, optimization can also result in lower purchase cost.

All planning decisions are made based on forecasts. Inventory smoothing may pose risk of overstocking, which is less in case of regular purchase. This is because the forecast error is less in near future. This risk in case of inventory smoothing can be mitigated by regular update of forecast and making the extra purchase decisions accordingly.