



The participants will be provided access to the real data of retail stores. The objective of the competition is to identify interesting and new ways of analyzing the data, using modern tools and techniques. The information regarding data availability will be shared soon.

Below are some basic concepts of retail business -

What is Out-Of-Stock?

A **stock out**, or **out-of-stock** (OOS) event is an event that causes inventory to be exhausted. While out-of-stocks can occur along the entire supply chain, the most visible kind are retail out-of-stocks in the fast moving consumer goods industry. Stock outs are the opposite of overstocks, where too much inventory is retained.

What is Buffer/Safety Stock?

A supply of stocks held as reserve to safeguard against unforeseen demands.

Problem Statements -

Problem Statement 1:

Identify Out-Of-Stock situation – In a retail chain consisting of ‘n’ number of stores and ‘x’ number of Products, the expectation here would be to identify possible Out-Of-Stock situations by means of few rules/alerts.

Caution – you will have sales data. But a zero sales or a sudden drop in sales may not imply an out of stock. It can be just the case that there was no buyer for the product or low demand during that period.

Problem Statement 2:

Buffer calculation Logic – Expectation here would be to find out the best algorithm for calculation of buffer/safety stock to reduce the lost sale opportunity.