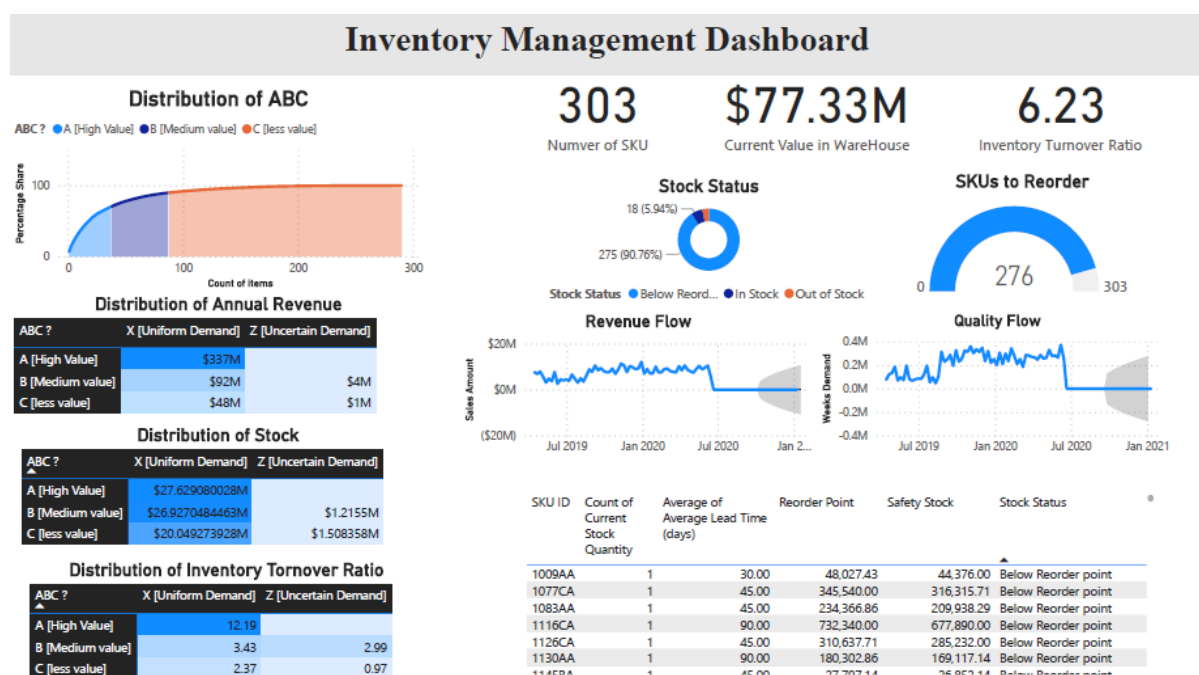In this project I applied Both ABC analysis and XYZ analysis to inventory management.

ABC analysis is a method in which inventory is divided into three categories, i.e A,B and C in descending value. The items in the A category have highest value, B category items are of lower value than A, and C category items have the lowest value.

XYZ analysis is a way to classify inventory items according to the variability of their demand or derived/forcasted consumption. XYZ analysis can be used to plan material requirements and inventory levels so that waste, production delays, or excessive inventory levels can be avoided.

Inventory Management Dashboard

Distribution of ABC

ABC ? ● A [High Value] ● B [Medium value] ● C [less value]

303	**$77.33M**	**6.23**
Numver of SKU	Current Value in WareHouse	Inventory Turnover Ratio

Stock Status

18 (5.94%)

275 (90.76%)

Stock Status ● Below Reord... ● In Stock ● Out of Stock

SKUs to Reorder

0   276   303

Distribution of Annual Revenue

ABC ?	X [Uniform Demand]	Z [Uncertain Demand]
A [High Value]	$337M	
B [Medium value]	$92M	$4M
C [less value]	$48M	$1M

Distribution of Stock

ABC ?	X [Uniform Demand]	Z [Uncertain Demand]
A [High Value]	$27.629080028M	
B [Medium value]	$26.9270484463M	$1.2155M
C [less value]	$20.049273928M	$1.508358M

Distribution of Inventory Tornover Ratio

ABC ?	X [Uniform Demand]	Z [Uncertain Demand]
A [High Value]	12.19	
B [Medium value]	3.43	2.99
C [less value]	2.37	0.97

Revenue Flow

Jul 2019   Jan 2020   Jul 2020   Jan 2...

Quality Flow

Jul 2019   Jan 2020   Jul 2020   Jan 2021

SKU ID	Count of Current Stock Quantity	Average of Average Lead Time (days)	Reorder Point	Safety Stock	Stock Status
1009AA	1	30.00	48,027.43	44,376.00	Below Reorder point
1077CA	1	45.00	345,540.00	316,315.71	Below Reorder point
1083AA	1	45.00	234,366.86	209,938.29	Below Reorder point
1116CA	1	90.00	732,340.00	677,890.00	Below Reorder point
1126CA	1	45.00	310,637.71	285,232.00	Below Reorder point
1130AA	1	90.00	180,302.86	169,117.14	Below Reorder point
114ERA	1	45.00	27,707.14	26,852.14	Below Reorder point

From the above dashboard. The total current value in the warehouse is 77.33 million dollars.

The inventory turnover ratio is a metric that measures how efficiently a company manages its inventory and is 6.23% which is high and indicate that a company is selling its inventory quickly.

For the stock status 91% of the stock are below reorder point.