Data is collected from transactions, customer preference, shopping behavior, etc to build a variety of algorithms (statistical algorithm, Deep Learning algorithm, and ML algorithm)

"We are using Redshift as our data warehousing platform and data lake, which hosts all data that gets executed on a variety of systems (transaction systems, web, and app). There are a variety of sources including customer feedback, buying patterns, etc to feed ML-driven algorithms," Subramanian reveals

.Bigbasket has gone a step ahead and developed yet another smart offering known as "Smart Basket." It is an advanced model based on ML and analytics system that helps customers to save time and explore other products, while it creates a list of items most likely to be purchased on the basis of system intelligence.

The system analyses previous purchases, and shopping behavior, and understands the repetition of items in grocery and subcategories. The algorithm then helps in curating a list of items that the customer is expected to add to the shopping.

"Besides smart basket, we have developed a recommendation engine built using a variety of analytical streams such as FP growth, affinity analysis growth, and collaborative filtering. The recommendation algorithm helps customers to explore new items as well as maintain their preference while giving suggestions," avers Subramanian.

## **Understanding consumer behavior**

In its broadest sense, consumer behavior is concerned with how consumers select, decide, use and dispose of goods and services. It covers individuals, groups, or organizations of any vertical.

It gives a good idea and insights about consumers' emotions, attitudes, and preferences which affect buying behavior. Thus, helping marketers to understand the needs of customers, bringing value to the customers, and in return generating revenue for the company.

## Consumer behavior prediction can be done by:

- 1. **Segmentation**: separating customers into smaller groups based on buying behaviors. This helps in the separation of concerns, which in turn helps us identify the region of the market.
- 2. **Predictive Analytics**: we use statistical techniques to analyze previous historical data to predict the future behavior of customers.