DataStorm 4.0

3_Amigos

Problem Definition

- The business problem presented in this case is to optimize the freezer assortment and volume allocation for Company XYZ's products in their stores.

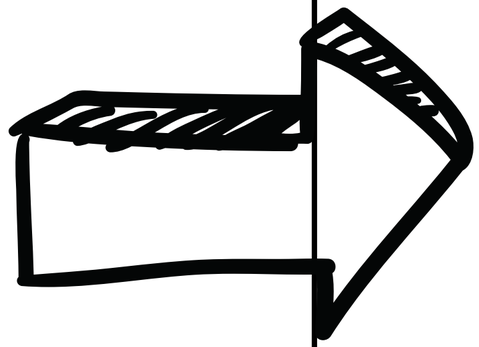
- The goal is to maximize the total margin earned from each store by ensuring a balanced product assortment, avoiding stock shortages, and fulfilling orders efficiently.

Methodology

Raw data data preprocessing → EDA → Feature selection and scaling → Evaluation → Cluster analysis → Freezer allocation → Ranking

Features

- Outlet_ID km(cluster)
- Freezer
- pid
- Sum of total volume,
- Sum of total sales,
- rank
- Outlet_ID
- area(sqft)
- volume
- product_name
- price, cost
- stock
- Freezer Name, Model Number
- Volume Capacity
- Power and maitainance Cost
- Week, Start Date, End Date



- Pid
- rank
- product_name
- margin
- Stock_Total_volume
- Sum_of_total_Margin

Key Insights

we identified the top-selling products for each segment and ensuring they are stocked in the freezers across all stores

Interventions

- Ensure stock availability: To fulfill orders in a timely and efficient manner, it is important to ensure that the total stock distributed is below the current available stock.

- Monitor and adjust assortment and volume: Regularly monitor the sales data and adjust the assortment and volume of products in each freezer type as needed to optimize sales and margin.

- Implement dynamic pricing strategies: By implementing dynamic pricing strategies based on demand and supply conditions, the company can optimize their pricing to maximize margins while minimizing stock shortages or overstocking.

Thank You