



VIVA REPORT- Strategic Inventory Management for Enhanced Sales Performance.

- HARSH(21F3001232), BDM CAPSTONE PROJECT

INTRODUCTION

- This BDM capstone project revolves around a neighborhood wholesale ration and cattle feed store, Mahendra Kumar and Brothers.
- I took this shop as my project, it has several items for analysis.
- The project revolves around solving problems such as inventory irregularity, the difference between average sales per month, etc., faced by them using data analysis.



ORGANIZATION BACKGROUND AND PROBLEMS

- ▶ Mahendra Kumar and Brothers is a wholesale ration and cattle feed store which keeps items like Sugar Sack (50kg), Mustard Oil Can(15kg), Cotton Seeds etc. The shop sells for farmers, daily customers and other local people around the neighbourhood.
- ▶ While interacting with the owner of the shop, I found that the inventory is a big problem for such ration stores, because there is uneven sales. Further, they precisely don't even know that what is the average sales per month in terms of volume and revenue.
- ▶ Furthermore, he wanted to know out of the Business Units given for the analysis, which gives him the best sales and revenue and which is not so fruitful and he should think about it.

Problems Faced/ Objectives of the Project



1. To analyze the sales and inventory of particular BUs and see their respective trendlines.
2. To understand which BU among the selected ones gives the highest sales and highest volume and, on the other hand, the worst performing BUs.
3. What are the average sales per month? What are the reasons for the difference in sales for different months?

Results

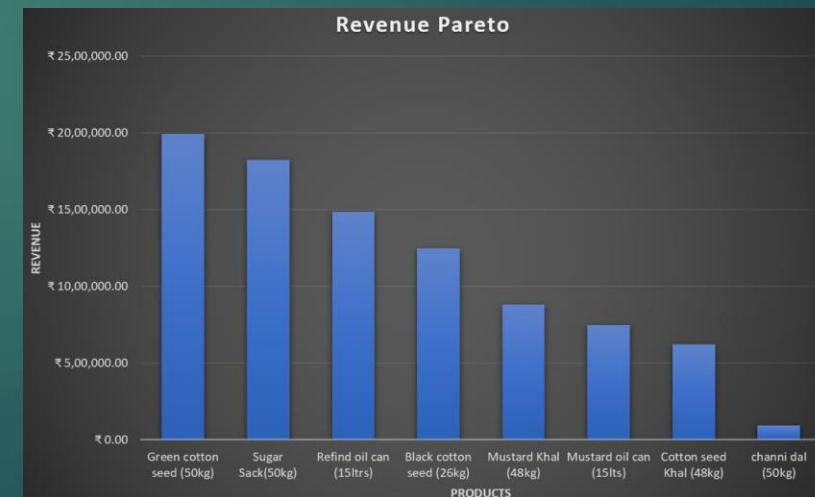
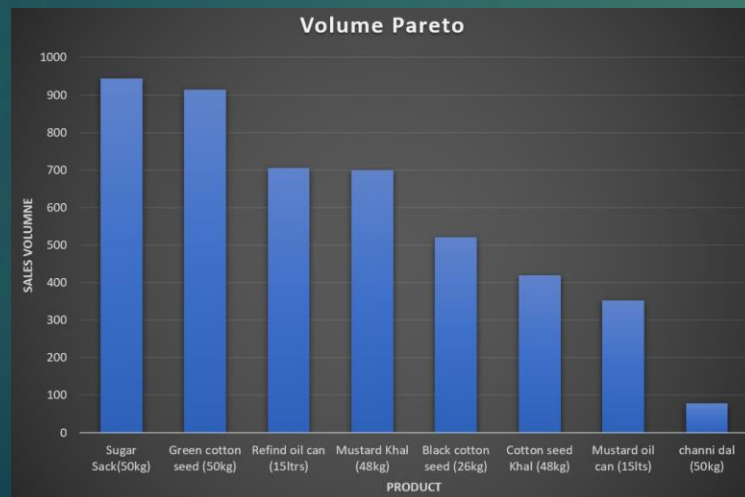
- ▶ I received the data in raw form and converted it into an excel file using the OpenRefine tool. The tool also helps to identify inconsistencies. Filled the persistent gaps and finalized the dataset.
- ▶ The dataset was analyzed using excel functions – VLOOKUP, Pivot tables, AVERAGEIF, SUM, COUNTA, etc.
- ▶ The detailed analysis of the ledger and inventory showed that Sugar Sack (50kg) and Green Cotton Seed (50kg) has highest volume sales and revenue respectively. On the other hand, Channi Dal (50kg) has the lowest volume sales and revenue.
- ▶ The all-inclusive pursual on inventory showed that few items like Channi Dal (50kg) and Green Cotton Seed (50kg) has the lowest days of sales available (0-1 days), while, Mustard Khal (48kg) has the highest days of sales available (10 days).

Findings

1. **Ledger** – It is the daily stock-keeping of the shop from 16th November 2022 to 15th April 2023. We have used different parameters for the analysis - Stock(Current Inventory), New Stock , Day-end Stock and other product attributes.

2. **Volume Pareto** – The pareto principle is verified. Sugar Sack (50kg) is best BU, Channi Dal (50kg) is sold the least.

3. **Revenue Pareto** – The pareto principle is verified. Green Cotton Seed (50kg) is the best performing BU, Channi Dal (50kg) is worst-performing BU in terms of revenue.

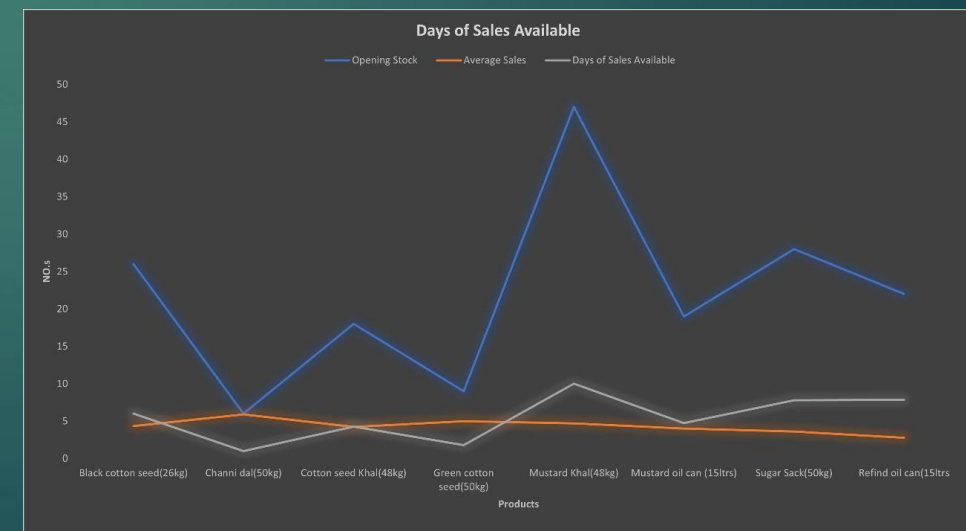


4. **Volume Trend** – The average of 6 months is terms of sales, 772. There is extreme surge in the month of February due to traditional aspects of marriages in the state of Rajasthan commonly known as Dev-Uthni.

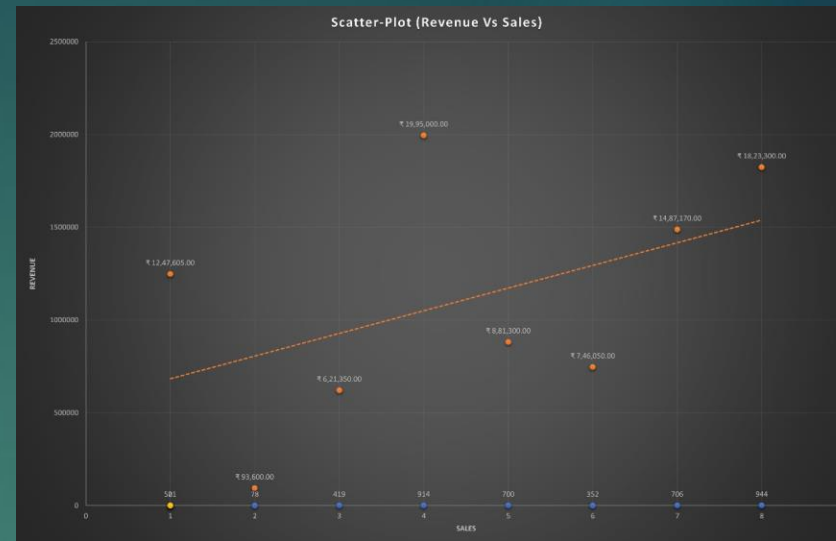
5. **Revenue Trend** – The average of 6 months in revenue is 14,82,562 rupees.



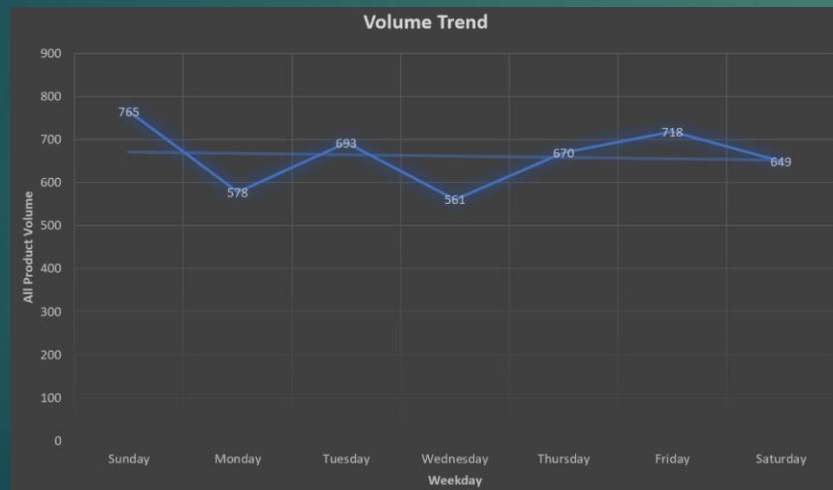
6. **Days of Sales Available** – From the opening stock of all the SKUs, calculated the average sale of each SKU. It describes how many days its takes to sell the opening stock to get sold.



7. Scatterplot Correlation– The scatterplot between volume sales and revenue show high positive correlation, which clearly shows they are highly correlated and they affect each other on the rise and vice-versa.



8. Day-wise Trend – According to the volume trend, it shows that Weekends has the highest sales. On the other hand, revenue trend shows that Sunday has highest revenue and Monday and Wednesdays are the lowest income days.



Interpretations and Recommendations

- ▶ Introduce complementary products or explore variations in existing ones to cater to diverse customer preferences.
- ▶ Leverage the observed surge in sales during winter months and capitalize on cultural events like marriages.
- ▶ Fine-tune inventory levels based on the Days of Sales Available (DSA) analysis.
- ▶ Implement loyalty programs to encourage repeat business. Offer incentives such as discounts, special promotions, or loyalty points for regular customers.
- ▶ Capitalize on the observed higher sales on weekends by introducing exclusive weekend promotions or special offers. This strategy can create a sense of urgency and attract more customers during peak shopping times.
- ▶ Create an online presence through a website or on popular e-commerce platforms. Partner with local events or businesses to increase visibility and attract more customers.



Thank You!