

BDM Project

Mid-term Submission

(February - April Cycle)



BSc. in Data Science and Programming
IIT Madras, Chennai

Title-

**“Revenue Revolution: A Comprehensive Analysis of Sales Insights
to maximize Profit”**

(for Maha Lakshmi Mart, Ghaziabad-201206)

Submitted By- Poorvika Gupta

Roll no.- 21f1006157

Date- 8 March 2023

Table of Contents

S.No.	Topic	Word Length
1.	Executive Summary and Title	200
2.	Proof of originality of the Data	-
3.	Metadata and Descriptive Statistics	50-75
4.	Detailed Explanation of Analysis Process/Method	100-150
5.	Results and Findings	-

TITLE

“Revenue Revolution: A Comprehensive Analysis of Sales Insights to maximize Profit”

Executive Summary

I have planned to collect the data from a Maha Lakshmi Mart, a multipurpose store, situated in Ghaziabad-201206 for the last 3 years. It is a retail establishment that sells a wide variety of products and services, catering to the needs of diverse customer segments. It is a B2C business, meaning it sells goods to customers. It caters to customers looking for convenience, affordability, and a broad range of options. From groceries and household items to electronics, and home appliances, it has it all. I went to the store to learn about the supply and sales processes. I have talked to the manager about the monthly money it brings in and identified the issues with its lower sales volume as compared to other establishments in the neighborhood. The other issue he brought up included products that go bad in this undertaking. To identify the underlying causes of the issues, a one-on-one conversation will be held with the store manager. With the investigation of sales variables and other factors like quantity, revenue, and profit analysis, the project is anticipated to answer the issues raised by the management. The project will perform a thorough analysis to identify the improvements required to boost income and reduce waste.

Proof of originality of the Data

- [Letter signed by Store Manager](#)
- [Data Shared Excel sheet](#)
- [Store Photos](#)

Metadata and Descriptive Statistics

Terms Used in data collection

- Opening Balance: This is the amount of stock that was in the store on the days that the data were collected.
- Inside: This is the stock that was acquired from the makers throughout the time period considered.
- Outwardly: This refers to the inventory/items that were sold out during the time frame.
- Closing Balance: Stock that remains in the business after the period has passed is referred to as the closing balance.
- Quantity: Quantity is the total number of the given item in stock.
- Rate: The defined value per unit of an item in the stock.
- Value: The total cost of the given item over the entire stock.
- Item: The name of the retail item.
- Category: The thing fits a specific category, which is called a category.
- Timeline: I gathered the data between February 1 and February 28, or around one month, based on the aforementioned factors.

The information was gathered based on sales insights, which included stock that had previously sold out throughout the timeframe, stock that had been obtained from manufacturers within that timeline to sell, and stock that had been left over. All of this information will be utilized to determine the most popular product or category that significantly contributes to the revenue earned and to assess the category that is losing money for the shop.

Item Analysis and Category analysis is done and Maximum/minimum revenue, quantity and margins has been analyzed to determine factors or items that affecting the profits and causing wastage also.

Detailed Explanation of Analysis Process/Method

The approach to do a comprehensive analysis of sales insights which can provide valuable information to help maximize profits and reduce losses are as follows-

1. Identification of top-performing products: By analyzing sales data, you can identify which products are selling the most and generating the most profit. This information can help you focus your marketing and sales efforts on these products to maximize profits.

2. Analysis of customer behavior: By studying customer behavior patterns, types of customers who are most likely to purchase products and the types of marketing messages that are most effective in converting them. This can help in targeting marketing efforts more effectively and increase sales.

3. Identification of underperforming products: By analyzing sales data, you can also identify products that are not selling well or are generating losses. This information can help to make data-driven decisions about which products to discontinue to minimize loss.

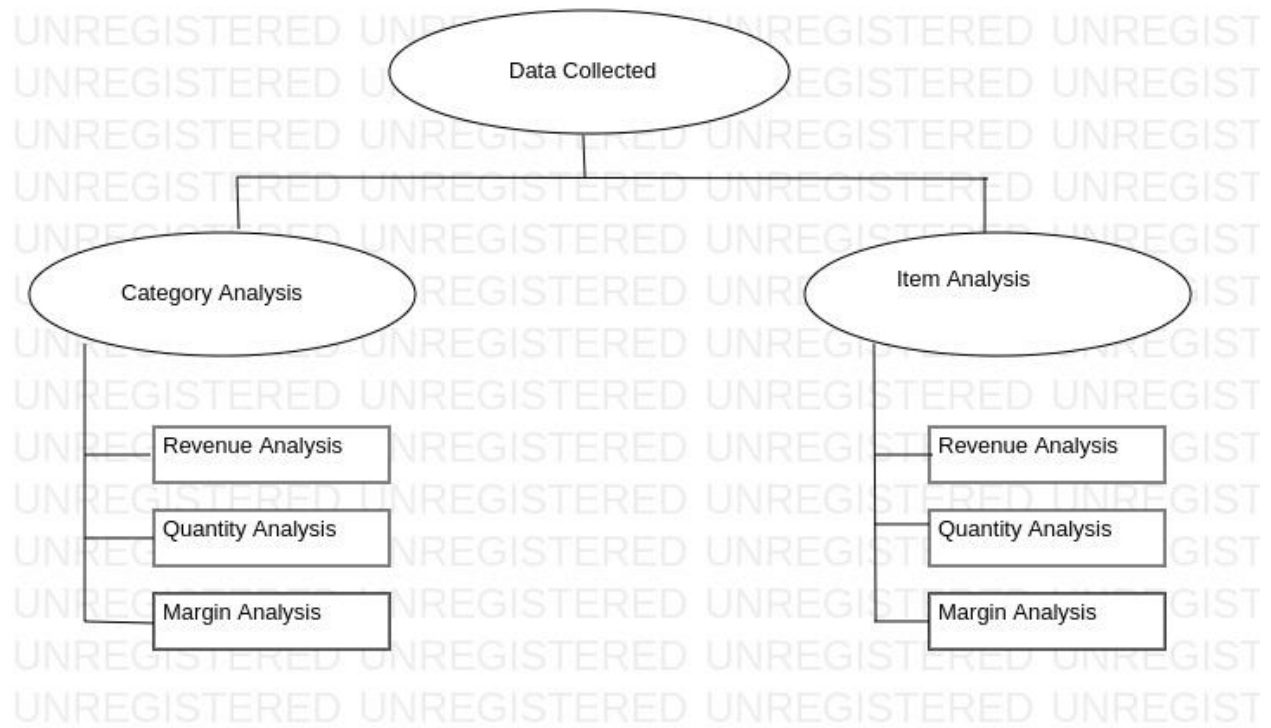
4. Pricing analysis: By analyzing sales data and pricing strategies, it can be easily identified the optimal price points for products to maximize profits. This information can help adjust pricing strategies to increase sales and profits. This will include quantity and top-performing products analysis, revenue and margin analysis.

5. Proper Visualization: Through proper visualization tools like pivot tables, bar graphs, line graphs data can be easily interpreted. Further, geomaps would be a great source to find the known competitors in the locality.

6. Item Analysis: Item wise categorization on the basis of inwards and outwards stock items during the timeline to maximize the profit and minimize the wastage.

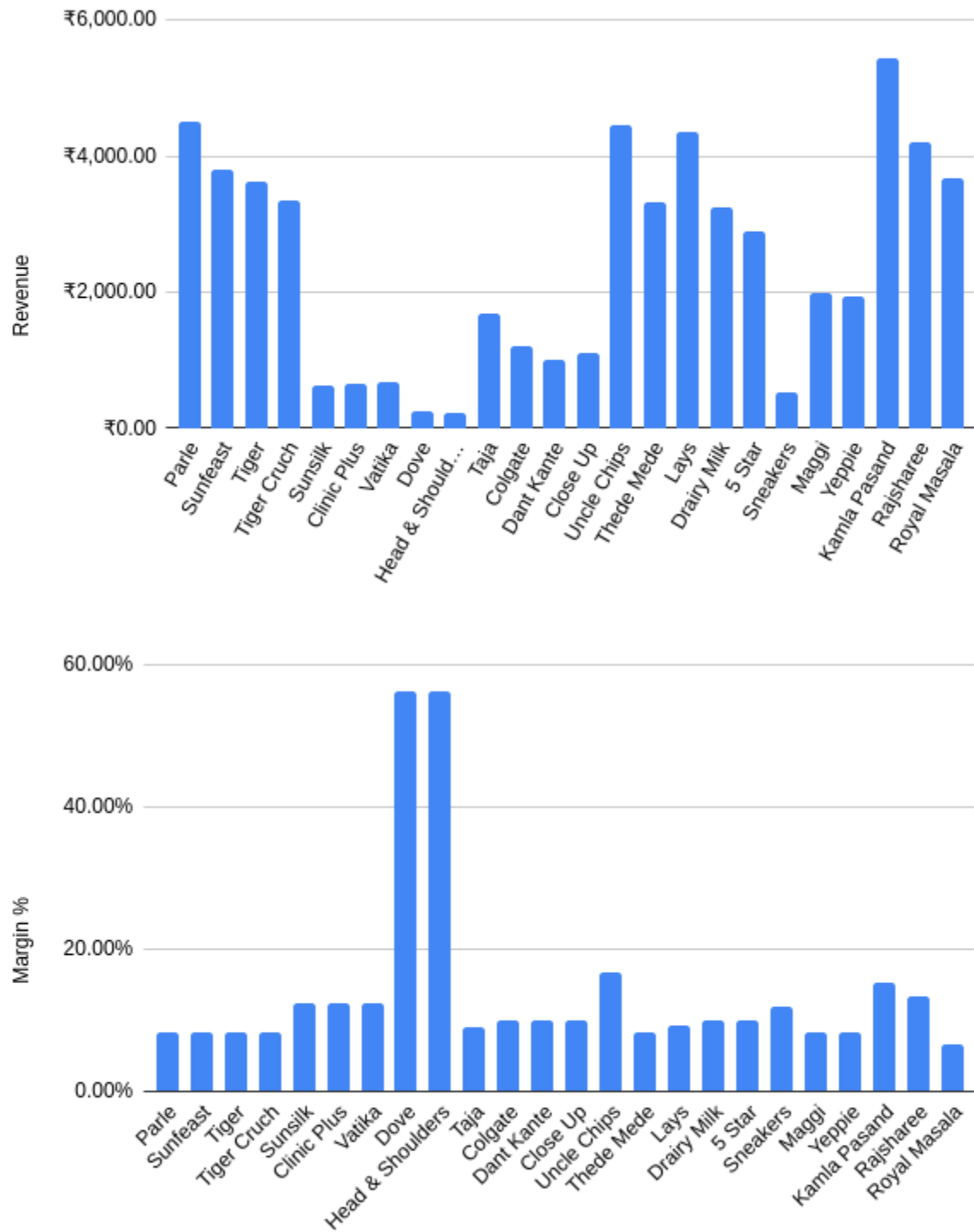
[Link to Analyzed Excel sheet](#)

Flowchart showing the process of data analysis



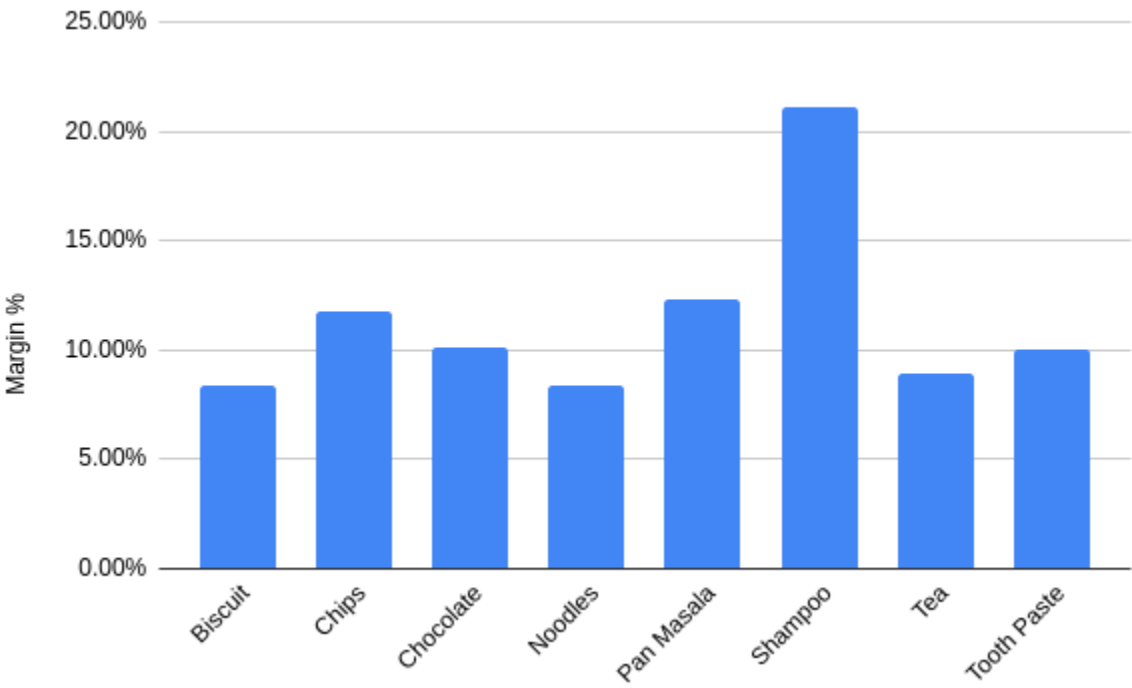
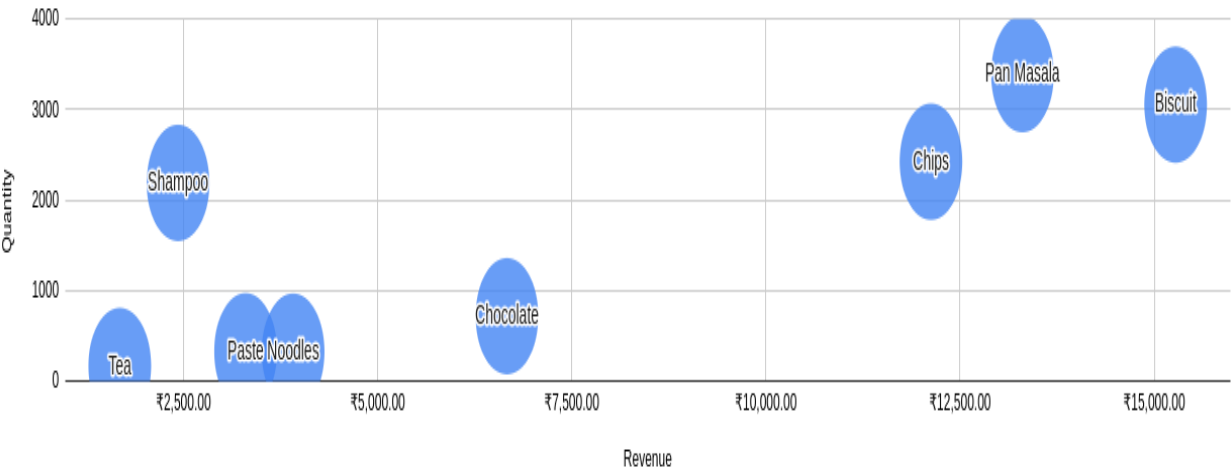
Graph Visualization of analyzed data items

Item Analysis



Category Analysis

SUM of Revenue and SUM of Quantity



Results and Findings

- The objective of the proposed project includes the identification of factors responsible for revenue generation and evaluation of underperforming products.
- The project is expected to address the above mentioned problems by collecting required data and to find out the most relevant data effective to profits and loss in Maha Lakshmi Mart.
- Through analysis it is observed that maximum revenue is generated through Kamla Pasand whereas Head & Shoulders is responsible for minimum revenue.
- Talking about margins, so Dove is creating maximum margins and Royal Masala is responsible for minimum margins.