

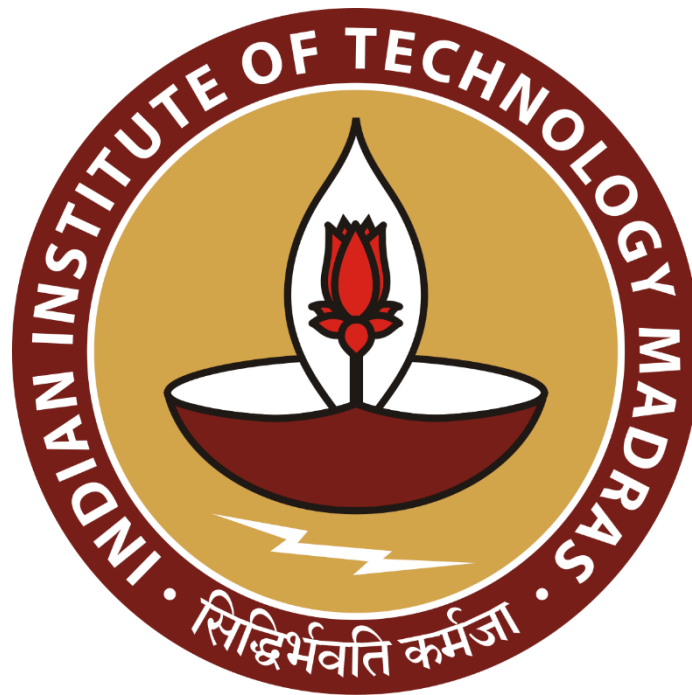
Optimizing Inventory Management for Priya General Store's Enhanced Profitability.

A Final submission for the BDM capstone Project

Submitted by

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Contents

1	Executive Summary	3
2	Detailed Explanation of Data Analysis Process	4
3	Results and Findings	10
4	Interpretation of Results and Recommendation	10
5	Presentation and Legibility of the report	12

Declaration Statement

I am working on a Project titled “**Optimizing Inventory Management for Priya General Store's Enhanced Profitability**”. I extend my appreciation to **Priya General Store**, for providing the necessary resources that enabled me to conduct my project.

I hereby assert that the data presented and assessed in this project report is genuine and precise to the utmost extent of my knowledge and capabilities. The data has been gathered from primary sources and carefully analyzed to assure its reliability.

Additionally, I affirm that all procedures employed for the purpose of data collection and analysis have been duly explained in this report. The outcomes and inferences derived from the data are an accurate depiction of the findings acquired through thorough analytical procedures.

I am dedicated to adhering to the principles of academic honesty and integrity, and I am receptive to any additional examination or validation of the data contained in this project report.

I understand that the execution of this project is intended for individual completion and is not to be undertaken collectively. I thus affirm that I am not engaged in any form of collaboration with other individuals, and that all the work undertaken has been solely conducted by me. In the event that plagiarism is detected in the report at any stage of the project's completion, I am fully aware and prepared to accept disciplinary measures imposed by the relevant authority.

I understand that all recommendations made in this project report are within the context of the academic project taken up towards course fulfillment in the BS Degree Program offered by IIT Madras. The institution does not endorse any of the claims or comments.



Signature of Candidate

Name: **Satyam Kumar**

Date: 05-11-2023

Executive Summary

This project revolves around **Priya General Store**, a small, decade-old kirana store established in 2003 by **Pradeep Kumar**. Located in **Balupur Lane, Patna**, the store caters to **B2C customers**, offering a wide range of products, including stationary, gift items, general items, Maggi, shampoo, ice cream, cold drinks, and milk.



Priya General Store faces several challenges, including **seasonal fluctuations** in sales, **inventory management issues**, and concerns related to storage and product returns. These challenges have a direct impact on the store's **profitability**.

The project aims to address these challenges by using data analytics and inventory management strategies to optimize stock levels, reduce losses, and improve efficiency.

In this project, tools like **Matplotlib**, **Pandas**, and **Excel** are used to analyze and visualize data. Matplotlib and Pandas, which are Python tools, help us make both simple and interactive visuals. Excel's **pivot tables** and **charts** make it easy to explore trends and create dynamic reports. The combination of these tools ensures a comprehensive and accessible representation of key findings, aiding stakeholders in understanding and making informed decisions related to inventory management at Priya General Store.

The monthly sales trends revealed a significant surge in **October**, attributed to **festive seasons**, while **November** experienced a **decline**, indicating potential seasonal factors affecting specific product categories. Category-wise profitability analysis identified **snacks** and **beverages** as the most profitable, followed by dairy products.

Recommendations include developing strategies to **capitalize on festive seasons**, **adapting inventory to seasonal changes**, and **optimizing product discoverability** and **marketing strategies** for high-profit categories. The report emphasizes the need for nuanced pricing and sales strategies within specific categories, considering diverse characteristics.

In conclusion, this project provides **actionable insights** to Priya General Store for improving profitability through informed inventory management and pricing strategies. The combination of

data analytics and strategic recommendations aims to ensure the **long-term sustainability** and **success** of the store in a competitive market.

Detailed Explanation of Data Analysis Process:

1.Data collection and analysis

Data Source

- The dataset originates from Priya General Store, covering sales and inventory data from **September** to **November** 2023.
- Initially stored in a physical **notebook**, the data was subsequently transferred to an Excel spreadsheet for digital analysis.

Challenges Faced

- ❖ **Missing Values**: Encountered challenges related to **missing values** in the dataset. Multiple discussions with the owner were initiated to address missing values through clarifications or approximations.
- ❖ **Unreadable Data** : Data entries in the notebook ledger were found to be **unreadable**, posing a significant challenge.
- ❖ **Data Transfer Complexity** : The process of **transferring** data from the ledger to Excel was time-consuming due to the lack of a proper structure. Contemplated the creation of a table schema to streamline and improve the efficiency of data transfer.

Data Cleaning

The data underwent a thorough cleaning process to remove any **inconsistencies**, missing values, or outliers. It was then organized into categories like **beverages, dairy products, personal care, snacks, toys and stationary, and condiments**.

Validation:

Validation of data was done by discussing with the owner . Sales and Profit was validated by the owner.

Analysis

The analysis process primarily employed the Pandas library in Python for data manipulation and analysis, complemented by Excel for visualization. The chosen method offers several advantages that make it more appropriate than alternative approaches:

1. Versatility of Pandas:

Justification:Pandas is a robust library that excels in **data manipulation, cleaning, and analysis**. Its extensive functionalities, including data filtering, grouping, and statistical operations, provided a comprehensive toolkit for processing diverse datasets, as evidenced by the varied data structures and analyses shared. Methods like **df.describe()** are used for descriptive statistics.

2. Python's Efficiency for Complex Tasks:

Justification:Python, with Pandas, offers a more efficient and scalable solution for handling complex data tasks. The language's simplicity and readability, coupled with Pandas' optimized data structures, make it well-suited for diverse analyses, including **aggregations, calculations, and transformations**.

3. Excel for Visualization and Dynamic Reporting:

Justification:While Python and Pandas excel in data manipulation, Excel's strength lies in **visualization and dynamic reporting**. The seamless integration of Pandas with Excel allows for the creation of interactive dashboards and visually compelling charts, enhancing the communication of insights to a non-technical audience.

4. Pivot-table in Excel:

Justification: Excel's **pivot tables** and **charts** facilitate the creation of interactive dashboards, allowing decision-makers to explore **trends** and patterns effortlessly. This dynamic presentation is instrumental in deriving actionable insights for strategic decision-making.

2. Metadata Overview:

The Priya General Store dataset provides a comprehensive ledger of manually entered sales and inventory information. The data is organized into categories, including beverages, dairy products, personal care, snacks, toys and stationary, and condiments. Each category features specific columns detailing company information, types, quantities, costs, selling prices, monthly stock levels, and monthly sales figures. This dataset is stored in an Excel file, named '**BDM.xlsx**,' with each sheet representing a unique category.

```
Description: Priya General Store data
Source: Ledger file from Priya General Store, manually entered
Author: Satyam Kumar
CreationDate: 2023-12-01 to 2023-12-10
Tables: ['Categories', 'Toys and stationary', 'Condiments', 'Personal Care', 'Beverages', 'Diary products', 'Snacks', 'Montly_sale']
```

The provided TABLE below (CategoryRates) offers insights into the purchase and sales rates across various product categories at Priya General Store. The categories, including **Snacks, Beverages, Personal Care, Diary Products, Toys and Stationary, and Condiments**, each showcase distinct rates of purchase and sales. The purchase rates range from 10.9 to 87.0, while the sales rates vary from 14.8 to 107.2.

Categories	Purchase__Rate	Sales_Rate
Snacks	32.7	43.0
Beverages	52.7	66.6
Personal care	87.0	105.6
Diary Products	86.8	107.2
Toys and Stationary	54.6	76.0
Condiments	10.9	14.8

CategoryRates

The overall monthly sales data contains 4 columns i.e. **Month,Sale_Amount , Gross_Profit,Net_Profit**.The dataset captures essential financial details for Priya General Store, focusing on sales-related metrics for the months of September, October, and November.

Month	Sale_Amount	Gross_Profit	Net_Profit
September	60659	11327	10327
October	65709	12487	11487
November	44608	8177	7177

- September witnessed a solid performance with a substantial sale amount, contributing to a noteworthy gross profit.
- October showed a positive trend, with increased sales leading to higher gross profit.
- November experienced a decline in both sales and gross profit compared to the previous months, indicating potential seasonal or market variations affecting the store's performance.

3. Descriptive Analysis:

- **Descriptive Statistics:** Utilizing **Pandas** in **Python**, descriptive statistics were generated for key metrics such as quantity, purchase rate, and monthly stock amounts across all categories. This included mean, standard deviation, minimum, maximum, and quartile values.

Descriptive statistics of Quantity ,Purchase_rate ,Monthly_Stock_Amount

```
df = pd.read_excel('BDM.xlsx', sheet_name=f'Monthly analysis')
df.describe()
```

	Quantity	Purchase__Rate	Monthly_Stock_Amount
count	6.000000	6.000000	6.000000
mean	514.833333	54.113333	21545.831667
std	512.207152	29.938348	19736.367360
min	30.000000	10.900000	1636.500000
25%	167.000000	37.687500	7073.310000
50%	325.000000	53.630000	15469.120000
75%	792.750000	78.737500	37330.460000
max	1346.000000	87.040000	47807.970000

The data analysis reveals notable variation in product quantity, purchase rates, and monthly stock amounts across six categories. With average quantities around 514.83, purchase rates at approximately 54.11, and monthly stock amounts averaging 21545.83, the data suggests diverse patterns and potential opportunities for optimization in inventory management and pricing strategies. The high standard deviations indicate significant variability within each category.

- **Category-Specific Analysis:** Each product category (beverages, personal care, dairy products, snacks, toys and stationary, and condiments) underwent a detailed descriptive analysis, highlighting key metrics and variations.

Below is the descriptive statistics of top 3 categories:

Beverages

```
df = pd.read_excel('BDM.xlsx', sheet_name=f'Beverages')
df.describe()
```

	Volume(ml)	Cost_per_unit	Selling price	Monthly_Stock	Sept_sale	Oct_Sale	Nov_Sale	Sept_PROFIT	Oct_PROFIT	Nov_PROFIT	Sept_Sale	Oct_Sale.1	Nov_Sale.1
count	14.000000	14.000000	14.000000	14.000000	14.000000	14.000000	14.000000	14.000000	14.000000	14.000000	14.000000	14.000000	14.000000
mean	812.142857	52.714286	66.642857	64.761905	38.142857	38.714286	20.285714	298.857143	303.071429	155.000000	1479.214286	1553.571429	730.571429
std	604.332799	34.803688	43.453967	59.703459	33.544132	33.520209	25.610781	216.985947	192.656116	158.744594	883.878531	795.989439	624.168828
min	120.000000	13.000000	15.000000	7.333333	2.000000	4.000000	2.000000	18.000000	24.000000	4.000000	180.000000	240.000000	40.000000
25%	350.000000	30.500000	40.000000	16.000000	8.250000	12.250000	4.000000	157.000000	166.500000	57.000000	762.000000	1004.250000	365.000000
50%	750.000000	36.000000	41.000000	52.666667	37.000000	29.500000	8.500000	238.000000	266.000000	90.000000	1425.000000	1540.000000	470.000000
75%	1000.000000	73.250000	99.000000	100.833333	61.500000	60.250000	28.250000	485.500000	380.500000	169.500000	2282.500000	2220.000000	888.000000
max	2250.000000	111.000000	130.000000	208.666667	110.000000	115.000000	88.000000	684.000000	700.000000	550.000000	2720.000000	2800.000000	2200.000000

The dataset reveals notable variation in product metrics, with an average volume of 812.14 ml and a wide range from 120 ml to 2250 ml. Cost per unit shows diversity, ranging from Rs. 13 to Rs. 111, while selling prices fluctuate between Rs. 15 and Rs. 130. The data highlights the need for nuanced strategies in pricing and sales, given the observed diversity across product characteristics.

Dairy Products

```
df = pd.read_excel('BDM.xlsx', sheet_name=f'Dairy products')
df.describe()
```

	Cost_per_unit	Selling price	Montly stock	Sept_Sale	Oct_Sale	Nov_Sale	Oct_Profit	Nov_Profit	Sep_Sale	Oct_Sale.1	Nov_Sale.1
count	9.000000	9.000000	9.000000	9.000000	9.000000	9.000000	9.000000	9.000000	9.000000	9.000000	9.000000
mean	86.888889	107.222222	22.222222	24.777778	27.333333	21.111111	345.444444	216.111111	1782.777778	2169.444444	1442.444444
std	58.485991	86.240619	12.275767	18.129932	19.039433	18.100031	313.105059	156.213351	984.006832	1469.784092	928.508900
min	20.000000	26.000000	10.000000	7.000000	10.000000	4.000000	50.000000	35.000000	810.000000	840.000000	462.000000
25%	45.000000	50.000000	15.000000	9.000000	11.000000	7.000000	80.000000	44.000000	1300.000000	1155.000000	630.000000
50%	85.000000	90.000000	20.000000	20.000000	20.000000	11.000000	285.000000	240.000000	1365.000000	1300.000000	1300.000000
75%	99.000000	110.000000	25.000000	35.000000	48.000000	30.000000	528.000000	330.000000	2030.000000	2900.000000	1800.000000
max	200.000000	290.000000	50.000000	55.000000	57.000000	50.000000	900.000000	450.000000	3850.000000	5280.000000	3300.000000

Monthly stock levels have an average of 22.22 units, reflecting diversity in inventory across the observations. Sales in September, October, and November vary, with mean values of 24.78, 27.33, and 21.11 units, respectively. Profits for October and November show an average of Rs. 345.44 and Rs. 216.11. Monthly sales in September, October, and November have average values of 1782.78, 2169.44, and 1442.44, respectively.

Snacks

```
df = pd.read_excel('BDM.xlsx', sheet_name=f'Snacks')
df.describe()
```

	Cost per Unit	Selling Price	Montly_STOCK	Sept_Sale	Oct_Sale	Nov_Sale	Sept_PROFIT	Oct_PROFIT	Nov_PROFIT	Sept_Total_sale	Oct_Total_Sale	Nov_Total_sale
count	31.000000	31.00000	31.000000	31.000000	31.000000	31.000000	31.000000	31.000000	31.000000	31.000000	31.000000	31.000000
mean	32.683871	43.00000	43.419355	26.548387	29.387097	27.838710	117.354839	126.335484	109.212903	582.967742	594.677419	575.548387
std	32.786736	44.65572	39.001516	28.091326	31.931883	34.387107	131.964780	157.639618	134.167377	633.639934	625.404796	732.492769
min	2.000000	5.00000	3.000000	1.000000	1.000000	0.000000	7.000000	7.000000	0.000000	70.000000	65.000000	0.000000
25%	8.000000	10.00000	11.000000	9.000000	9.500000	7.000000	43.500000	42.500000	35.000000	210.000000	160.000000	142.500000
50%	18.000000	20.00000	30.000000	14.000000	16.000000	13.000000	60.000000	62.400000	48.000000	325.000000	400.000000	320.000000
75%	50.000000	57.00000	70.000000	30.000000	36.500000	28.500000	153.000000	172.000000	150.000000	720.000000	690.000000	482.500000
max	103.000000	170.00000	120.000000	90.000000	110.000000	135.000000	658.000000	846.000000	675.000000	2880.000000	2880.000000	2880.000000

The average cost per unit is Rs. 32.68, with a range from Rs. 2 to Rs. 103, indicating diverse pricing. The selling price shows a similar trend, with an average of Rs. 43.00 and a range from Rs. 5 to Rs. 170. Monthly stock levels average 43.42 units, showcasing inventory diversity. Sales in September, October, and November have mean values of 26.55, 29.39, and 27.84 units, respectively.

4. Monthly Sales Data Analysis:

- Sales Metrics:** The monthly sales data, consisting of columns such as **Month**, **Sale_Amount**, **Gross_Profit**, and **Net_Profit**, were analyzed to understand the financial performance of Priya General Store.

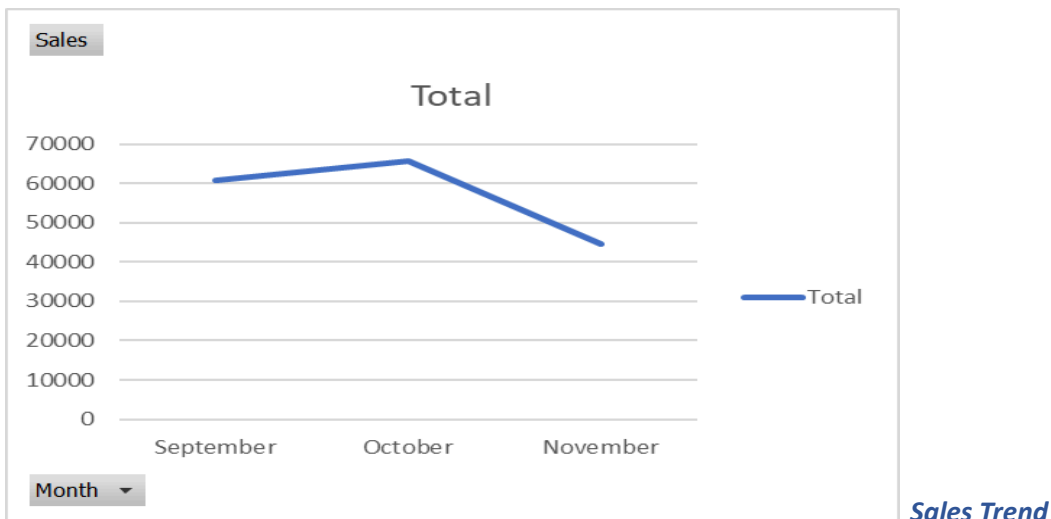
5. Category-Specific Analysis:

- **Beverages, Personal Care, Dairy Products, Snacks, Toys and Stationary, Condiments:** Each category underwent a detailed analysis, focusing on metrics like average volume, cost per unit, selling prices, monthly stock levels, and monthly sales figures.

Results and Findings: Graphs and Pictorial Representations

1. Monthly Sales Trends:

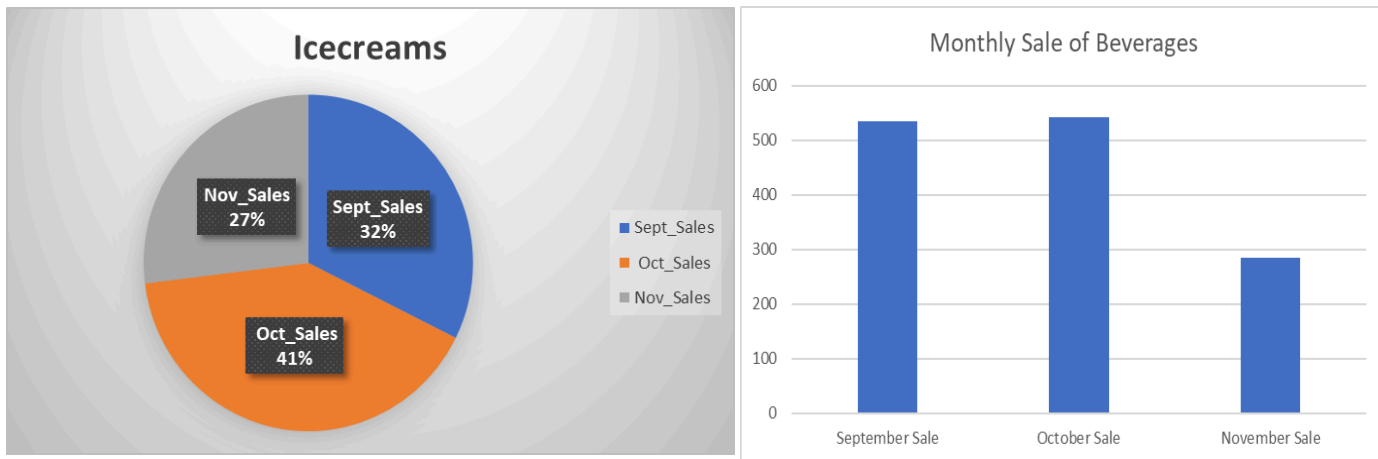
October experienced **maximum sales**, likely due to **festivals**. There is **decline** in the sales in the month of **November**. Overall gross profit is positive for three months.



- ❖ The sale amount for September is Rs 60659 , for October it increased to Rs 65709 and for November it is declined to Rs 44608
- ❖ **Sales Trend:** The data suggests a fluctuating sales trend, with October exhibiting the highest sales among the three months due to **festivals**.
- ❖ **Profitability:** Despite a decline in November, the store maintained a positive gross profit margin across all three months.
- ❖ **Seasonal Variations:** The variations in sales and profits could be indicative of seasonal factors or market dynamics influencing customer behavior and demand.

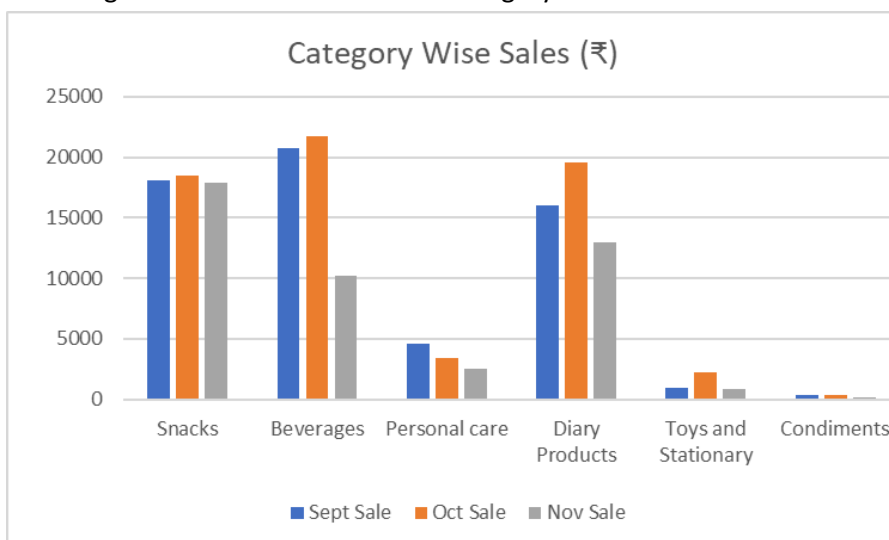
2. Seasonal Impact on Sales:

Sales of **beverages** and **ice cream** experienced a decline in the month of **November**, signaling a **seasonal variation**. There is seasonal fluctuation in the demand for these products. The sale of Ice-creams dropped to **27%** and beverages sales declined to **300 units** in the month of November .



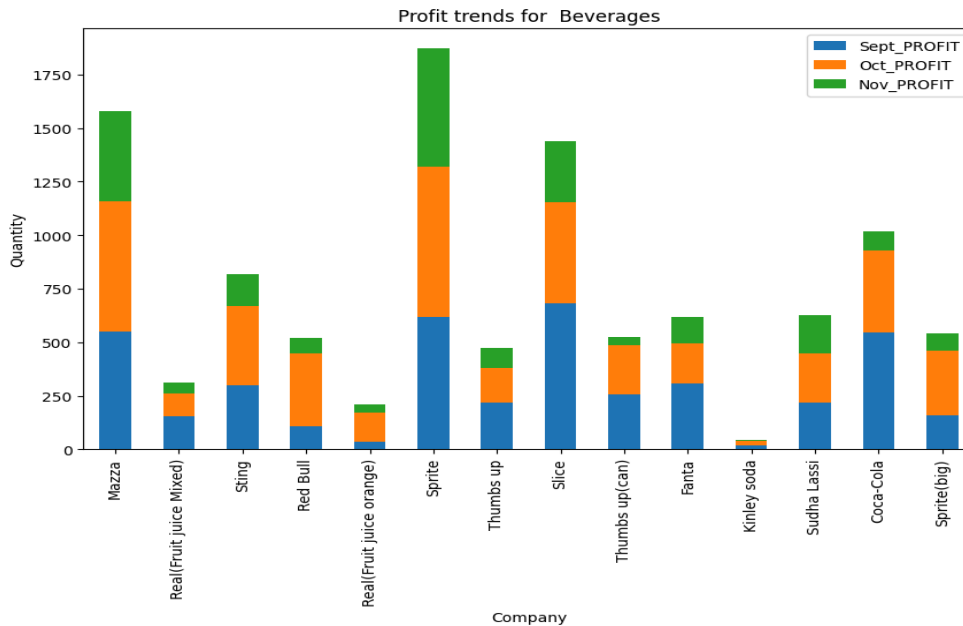
3. Category-wise Sales:

Almost in every category there is an **increase** in Sales in the month of **October**. Toys and Condiments are not performing stocks . Beverages in October were sold more. But in November sales dropped indicating seasonal variations. Snacks category has been consistent.



4. Beverages Analysis:

In the beverage category, **Sprite** emerged as the **leading SKU**, succeeded by Maaza, Slice, and Coca-Cola. However, **Fruit Juice(by Real)** and **Kinley Soda** are identified as **lower-performing stocks**. Seasonal variation caused low sales in the month of November [FIG].

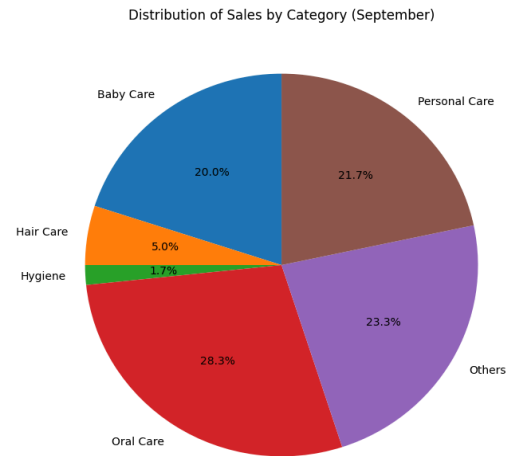
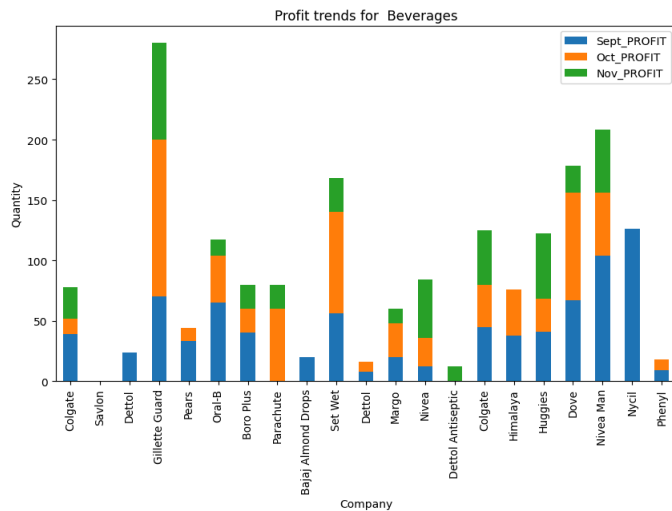


5. Personal Care Analysis:

Gillette Guard stands out as a top-profit SKU, succeeded by Nivea Men, Dove, and Set Wet Gel. Certain SKUs, such as Antiseptics, experience lower sales due to **discoverability** challenges. Some of the personal care items have high profit returns .

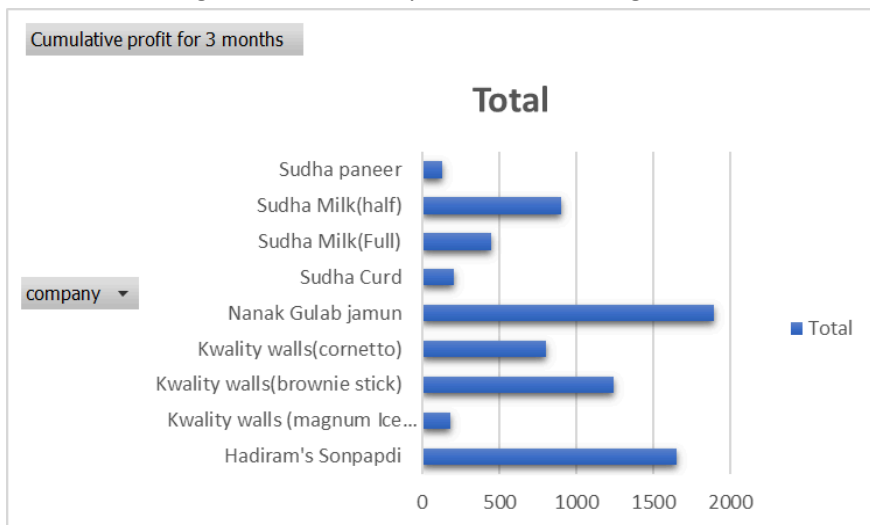
With the shop's limited space and the sheer variety of products, finding what you need can be a bit tricky. The presence of numerous other items adds to the challenge, making it harder for customers to spot their desired products easily.

The absence of Nycil powder sales after October hints at **seasonal variations**. Notably, **oral care products** like toothpaste and brushes consistently maintain **higher sales** across months.



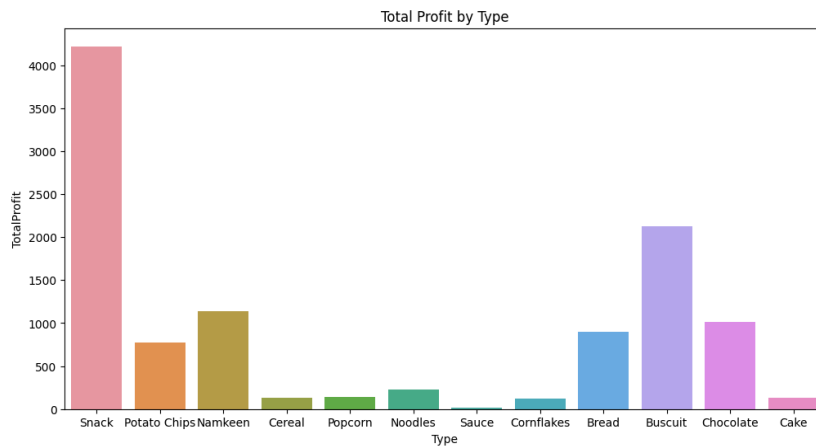
6. Dairy Products Analysis:

Gulab Jamun emerges as a **top-profit item**, primarily due to elevated sales in October during **festivals**. Following closely is **Haldiram Sonpapdi**, which also enjoys high demand. Ice creams, as a category, contribute significantly to overall profits, while consistent milk sales are driven by daily demand. **Sudha Paneer** and **curd** have less stock units because of the inconsistent demands. Also these items can go to waste if not purchased resulting in loss.



7. Snacks Analysis:

Products like **Kurkure**, **chips**, and **Lays** have high sales, contributing significantly to the store's profitability. However, items such as **noodles**, **cornflakes**, **cereal**, and **popcorn** experience lower sales, mainly because these items are **less discoverable** to customers within the limited space of the store. **Snacks** is the top performing category. The sale of snacks category is consistent across months.

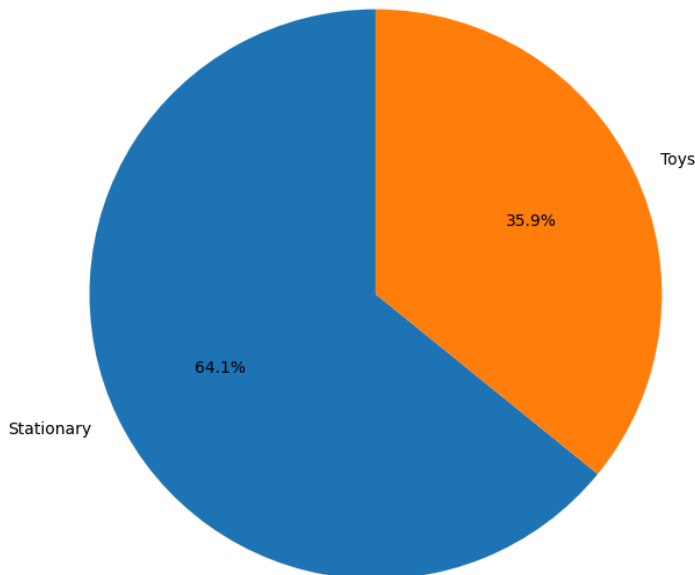


Company	Type
Kurkure(Popcorn)	Snack
Lays	Potato Chips
Surabhi(Namkeen)	Namkeen
Haldiram's Nut Cracker	Snack
Kurkure(Masala Mix)	Snack
Rings	Snack
Bingo(Tedhe Mede)	Snack
Bikano(Moong Daal Namkeen)	Namkeen
Kishan(Cornflakes)	Cereal
Too Yumm	Snack
Lalji(Mixture)	Snack
ACT 2(Instant Salted Popcorn)	Popcorn
Lays American Style	Potato Chips
Lays India's Magic Masala	Potato Chips
Bingo(Mad Angles)	Snack
Maggi	Noodles
Maggi(Aata noodles)	Noodles
Maggi	Noodles
Maggi(Tomato ketchup)	sauce
Mohun	cornflakes

8. Toys and Stationary Analysis:

Stationary items, including copies and pens, are the primary focus of sales, but their stock units are limited due to constrained space and fluctuating demand. Conversely, toys and gifts demonstrate lower performance as stocks. Toy sales experience an uptick during **festivals**, while these items are occasionally sold for birthdays or other special occasions. Stationary items contribute **64%** to the profit by this category while Toys **35.9%**.

Share of Profit: Stationary vs Toys

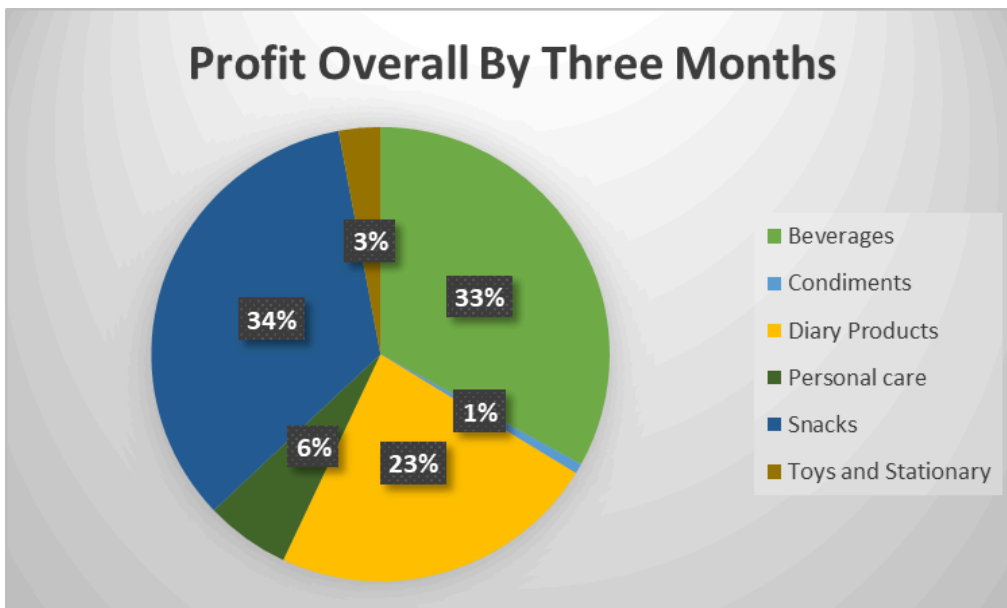


9. Condiments Analysis:

Condiments are low performing stocks. These items remain undiscoverable resulting in low sales.

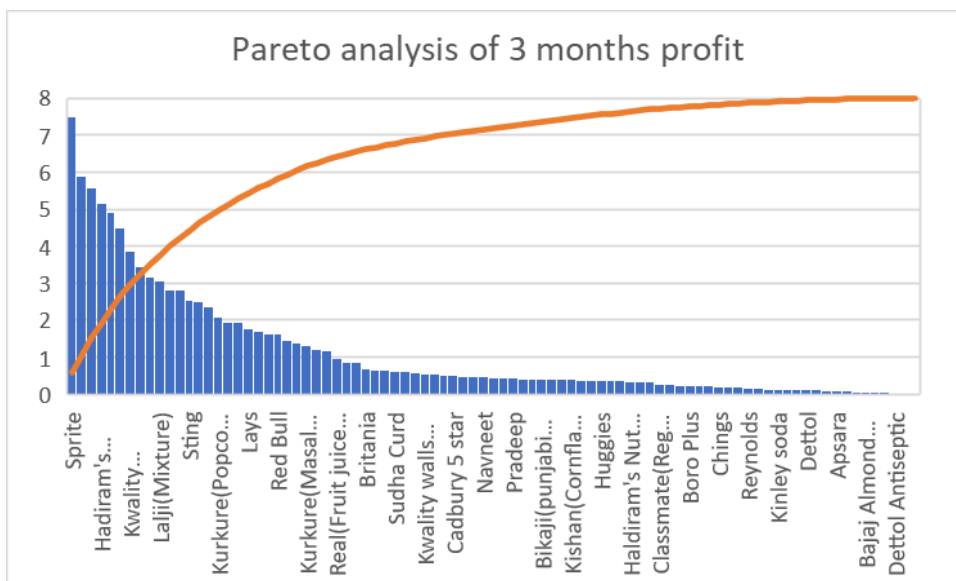
10. Profitability Comparison:

The total profit over three months, from September to November, suggests that **Snacks** consistently contribute more to overall profits due to **steady** sales. Despite a decline in November, Beverages profit share is close to snacks due to a surge of sales in October. Conversely, Condiments exhibit poor performance. The Toys and Stationary category performs better than condiments but still falls short of optimal performance.



11. Pareto Analysis :

The y-axis represents profit percentages by items, and it approximately adheres to the Pareto principle, wherein around **20%** of the items contribute to approximately **65%** of the total profit of three months.



Summary of Analysis

The analysis of **monthly sales trends** reveals that October recorded the highest sales, likely influenced by festivals, while November experienced a decline. Despite this, overall gross profit remained positive, indicating sustained profitability. **Seasonal** impact on sales was evident, particularly in the decline of **beverage** and **ice cream** sales in November. Category-wise, there was a general increase in sales in October across various product categories, with **toys** and **condiments** identified as underperforming stocks. In the beverage category, **Sprite** emerged as the top-performing SKU, while personal care products like Gillette Guard and Nivea Men showcased high-profit margins. **Dairy products**, especially **Gulab Jamun** and **ice creams**, contributed significantly to overall profits. Snacks, including Kurkure and Lays, stood out as the top-performing category with consistent sales. Despite challenges in **discoverability**, condiments were identified as low performers. The profitability comparison highlighted the consistent contribution of snacks to overall profits, closely followed by beverages, while condiments and the toys and stationary category faced challenges. The **Pareto analysis** demonstrated adherence to the principle, with approximately **20%** of items contributing to about **65%** of the total profit over three months.

Interpretation of Results and Recommendations

1. Monthly Sales Trends:

- **Interpretation:** October exhibited a significant surge in sales, likely influenced by **festive seasons**. November, however, experienced a decline, indicating potential **seasonal factors** affecting specific product categories.
- **Recommendation:** Develop strategies to **capitalize** on festive seasons, and adapt inventory to **seasonal changes**.

2. Seasonal Impact on Sales:

- **Interpretation:** The **decline** in November sales, particularly in **beverages**, suggests a seasonal shift. Cold weather might influence lower consumption of cold drinks and fruit drinks.
- **Recommendation:** Plan inventory and marketing strategies considering **seasonal variations**. Optimize stock levels based on weather-related demand changes.

3. Category-wise Profitability:

- **Interpretation:** **Snacks** and **Beverages** emerged as the most profitable category, followed by Dairy Products. Other categories like condiments, toys and stationary, personal care contribute to low overall profit. Some of these items remain undiscovered by the customers.
- **Recommendation:** Better organization of items to improve discoverability and strategically reducing or limiting the volume of non-performing stocks for improved efficiency.

Key Problems	Recommendation
Seasonal Variation	Optimizing inventory according to seasonal trends is essential. Maintaining stock levels based on historical patterns , such as the demand for cold drinks, can significantly contribute to increased profitability.
Optimization of Stock for festival occasions.	Based on historical Data , stocks could be scaled up or down to accommodate more profit during festive seasons.
Discoverability	Even within limited space, it is possible to enhance the discoverability of certain items. Prioritizing top-performing and market-researched useful items can contribute to effective promotion and discoverability of products. Moreover, this approach facilitates the introduction of new items to the inventory.
Tracking of SKUs	Leverage technology for keeping track of SKUs. This will help in tracking expiration and spoilage of old products.

Key Problems - Recommendation

Personal Anecdote and Suggested Solution:

During a casual visit to a local tea stall, I noticed they were running low on milk. Curious, I struck up a conversation with the vendor, and his response stuck with me: "More is always less in milk." It got me thinking about our own stock of perishable items, especially milk.

So, I shared this insight with the business owner, suggesting a solution to prevent milk wastage. Now, if there's surplus milk left in stock, we've started selling it to the nearby tea stall. It's a win-win – the tea stall gets the extra supply they need, and we avoid potential losses from perishable items.

This simple adjustment not only minimizes waste but also fosters a local partnership. It's amazing how a small conversation at a tea stall sparked an idea that's making a positive impact on our inventory management.

Presentation and Legibility of the Report:

- ❖ The report is well-structured, with clear **sections** and **headings**.
- ❖ **Text-highlighting** is done for effective reading.
- ❖ Graphical representations enhance the understanding of **key findings**.
- ❖ Descriptive statistics and analysis are presented in a concise and readable format.

- ❖ The use of Python's Pandas and Excel pivot tables offers a balanced approach for data manipulation and visualization.
- ❖ Recommendations are **specific** and **actionable**, providing a roadmap for improvement.
- ❖ The declaration statement ensures **transparency** and **adherence** to academic integrity.
- ❖ Content is arranged logically using **bullet points, headings, and subheadings**.
- ❖ Incorporated **visual** aids such as labeled tables and charts to support analysis.
- ❖ Maintain a polished and professional writing style throughout the document.
- ❖ Thorough **proofreading** was done to eliminate errors and ensure overall quality.
- ❖ **Executive summary** encapsulating **key points** for quick reference.
- ❖ Define **technical terms** clearly to facilitate reader understanding.
- ❖ Establish a coherent flow from the introduction to **analysis, conclusions, and recommendations**.
- ❖ Provide transparent explanations of analysis steps, offering rationale for **clarity**.
- ❖ Summarized significant results separately, emphasizing crucial insights.
- ❖ Articulated clear and concise recommendations.

Thank You.
