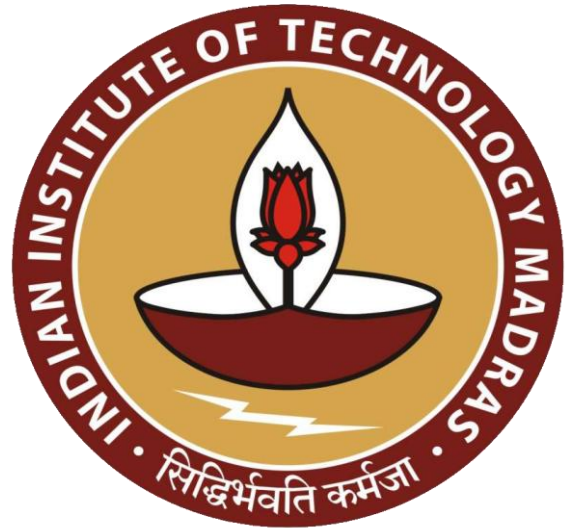


**BDM CAPSTONE
MID-TERM SUBMISSION**



**Effective Sales Strategies for Profit
Enhancement in Phoenix Pharma**



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Executive Summary

Phoenix Pharma, a B2B pharmaceutical business located in Visakhapatnam. Specializing in nephrology and cardiology drugs, the company serves as a critical link between drug manufacturers and local distributors in the southern part of Visakhapatnam. Sales and purchase data for the financial year 2023-2024 data has been collected to perform the analysis. Product data is collected from Jan 2024 - June 2024 for inventory analysis.

The challenges encountered by the organization are:

1. Maintaining profit margins
2. Inventory Management
3. Relocation of outlet

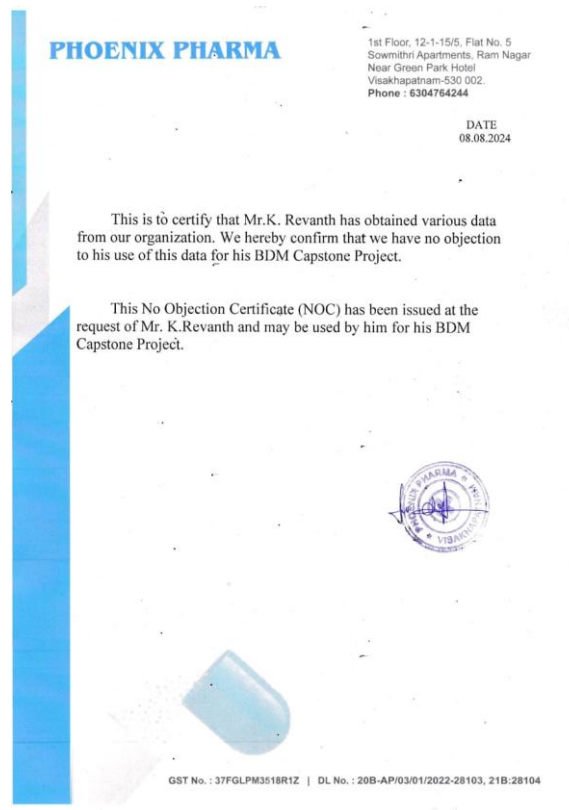
This mid-term report addresses these issues by focusing on optimizing inventory management and enhancing profitability through analytical approaches. Key findings from the data collected include:

1. **Sales and Purchase Trends:** Analysis revealed patterns in sales and purchase behaviors, highlighting seasonal demand fluctuations and identifying underperforming products.
2. **ABC Inventory Analysis:** The inventory was categorized into ABC segments, identifying top-performing products and those contributing the most to revenue. This analysis is crucial for prioritizing stock management efforts.
3. **Hotspots for Establishing Outlets:** A geographical analysis pinpointed strategic locations for potential outlet expansion, considering population density, healthcare needs, and accessibility.

These insights will guide Phoenix Pharma in making data-driven decisions to improve inventory turnover, reduce excess stock, and ultimately, increase profitability.

Proof of originality of the Data

Letter from organization in letter head with stamp and signature:



Images related to the organization



Link for data and interaction

https://drive.google.com/drive/folders/1_KEVjvCtjlvixQdj1W8GRZO_CObV9L70?usp=sharing

Metadata & Descriptive stats

Identifying the Sales and Purchase trends.

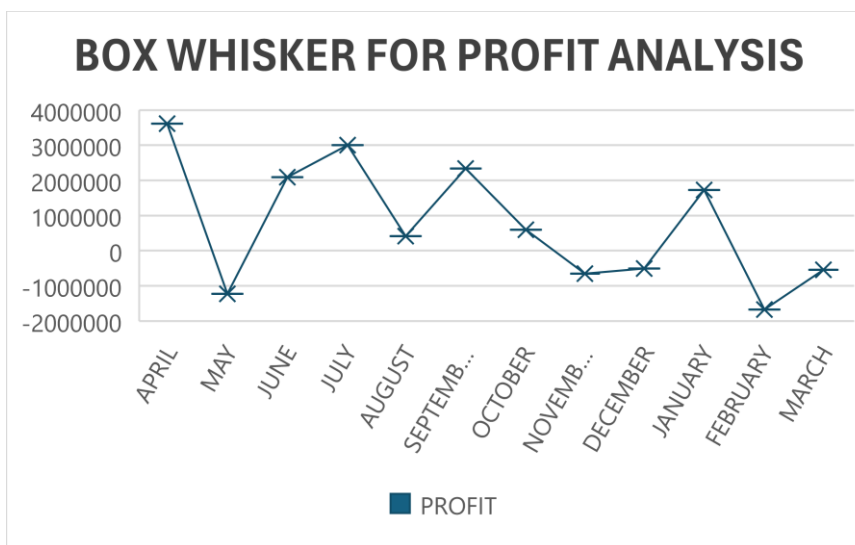
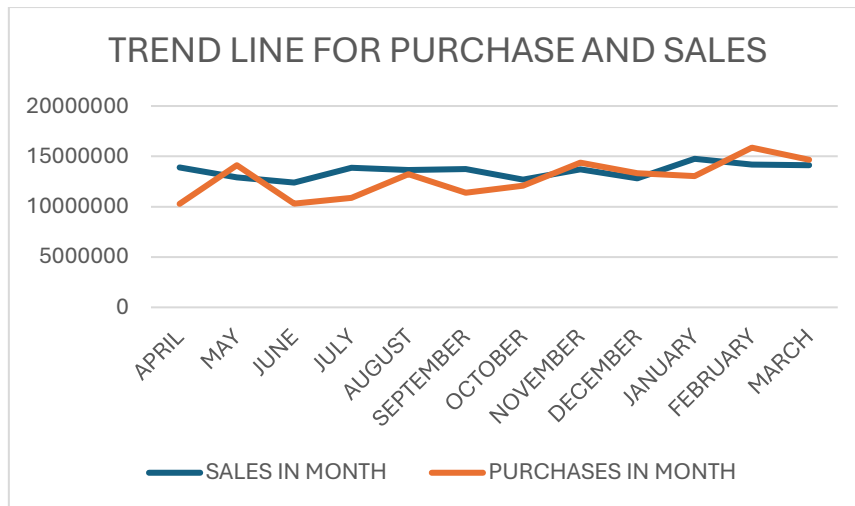
S&Pdata.xlsx in the drive link.

SALES AND PURCHASE DATA:

- Month: Consists of the month in which the sale and purchase is done.
- S.No: Represents the invoice number of the sale and purchase.
- Date: Date of the sale and purchase done.
- Party Name: Name of the party involved in the sale and purchase.
- Basic: Basic amount of the sale and purchase without taxation.
- Number of entries: 4129 entries for sales data and 272 entries for purchase data.
- Timeline of the data: The data is expanded over Financial year 2023-2024

Descriptive stats:

MONTH	SALES IN MONTH	PURCHASES IN MONTH
APRIL	13897542	10281984
MAY	12908941	14133833
JUNE	12394998	10300187
JULY	13871530	10866170
AUGUST	13630907	13219362
SEPTEMBER	13739098	11400371
OCTOBER	12672766	12080007
NOVEMBER	13706961	14363658
DECEMBER	12812624	13314700
JANUARY	14755757	13026750
FEBRUARY	14191661	15862510
MARCH	14106564	14648224
TOTAL	162689349	153497756



Avg sales in each month: 1,35,57,450

Avg purchases in each month: 1,27,91,480

Avg profit in each month: 7,65,966

Standard deviation of sales: 7,08,650

Standard deviation of purchases: 18,17,013

Standard deviation of profit: 17,50,348

The median of sales and purchase data is pretty much near to the mean point.

Median of profit: 5,02,152

Identifying hotspots for relocation.

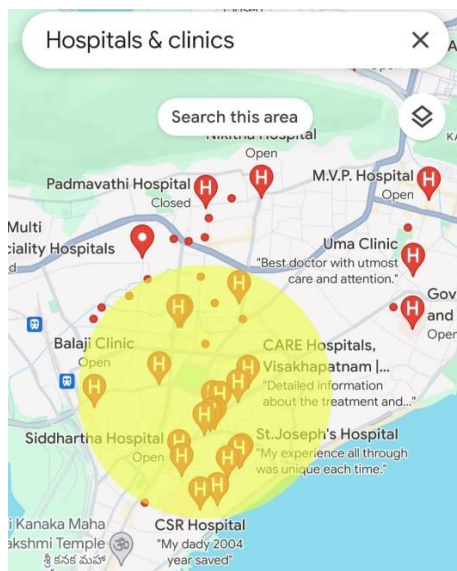
H Landmark symbol: used to represent a clinic or hospital in the location.

These locations are hotspot regions consisting of hospitals and clinics in the Visakhapatnam city. They are better alternatives for the organization to relocate.

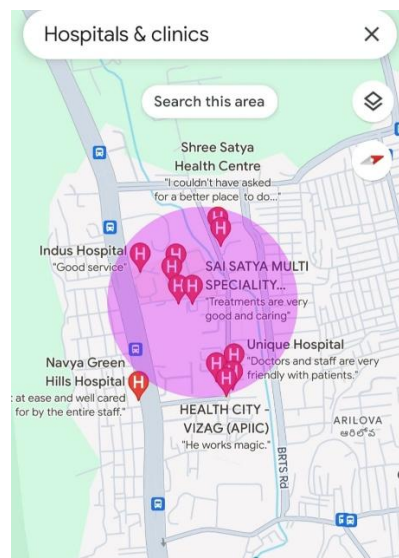
Descriptive stats:

Total hospitals and clinics in asilmetta jn:19

Total hospitals and clinics in arilova:12



Asilmetta jn



Arilova Health City

ABC Inventory analysis and top products identification.

Inventory data in google drive.

SALES AND PURCHASE DATA(inclusive of taxes)

- Item Description: Name of the medicine.
- Quantity: Quantity of the sold or purchased item.
- Avg price: Average price of the item sold or purchased.

- Amount: Total transaction involved with the product.
- No of items : 73
- A unit consists of 10 boxes.
- Collected data from Jan 2024 to June 2024.

Descriptive stats:

Total sales amount : Rs. 90638410

Total purchases amount : Rs. 72724048

Total quantity of sales: 584381 (includes sales from previous year purchase)

Total quantity of purchases: 575381

Costliest medicine: CELNESP

Most sold medicine by quantity : KETOCHECK 10'S

SNAPSHOT OF ABC ANALYSIS.

Item Description	Quantity	Cumulative Percentage	ABC Category
KETOCHECK 10'S	61377	13.76657491	A
MYCORITE S 360 10'S	28437	24.93537512	A
TACRORITE 0.5 MG (MRP 205) 10'S	10980	70.81249067	B
Q 10 ESENTIAL 10'S	4600	72.30268211	B
VOGLIRIGHT M 0.2 10'S	70	99.99750787	C
VIDARIGHT 50 10'S	43	100	C

Detailed Explanation of Analysis

Process/Methods

12 months of sale and purchase data from Jan 2024 to June 2024 was collected from the organization. The organization was using Tally software for billing and maintaining the data. The data was obtained on request, which was then cleansed , organized and converted into an excel file using pdf scrapping in python.

The sales and purchases data were used to plot purchase vs sales bar graph. The graph was plotted by taking months as x axis and total amount as y axis. The trend line and box whiskers are plotted using excel.

The ABC analysis categorizes products based on their cumulative percentage of total sales, dividing them into three categories: A, B, and C. Here's a summary of the categorization:

- **Category A:** These are the most valuable products, contributing significantly to the total sales. Products in this category typically make up the top 20% of items that contribute to about 80% of the sales.
- **Category B:** These products are moderately important. They are generally moderate in sales and quantity.
- **Category C:** These products contribute the least to total sales and are often the majority in terms of the number of items.

Hospitals, medical stores and clinics in the city were listed , to find a suitable place for relocation of the organization. Health corridors

Results and findings

After analyzing the data and examining the results, my insights are as follows:

Top 2 Products in Each Category from ABC analysis.

Based on the total sales amount, the top two products in each category are identified as follows:

- **Category A:**
 - **KETOCHECK:** Total Sales Amount = 12,477,804.65, has highest sales amount and quantity. Contributes 13 % of the total sales.
 - **MYCORITE S 360:** Total Sales Amount = 10,123,200.00 , has second highest sales amount. Contributes 11 % of the total sales.
- **Category B:**
 - **Q 10 ESENTIAL:** Total Sales Amount = 1,121,220.00, has lower quantity and higher price. Can be considered top product with respect to its percentage in total share(2.5 %).
 - **TACORITE 2 mg :** Total Sales Amount = 1,113,430.00, has lower quantity and higher price. Can be considered the second top product with respect to its percentage in total share(1.4 %).
 -
- **Category C:**
 - **TORCEL 20:** Total Sales Amount = 5,24,869.00 , has higher units and less price . Effecting inventory with higher quantity.

- **CELERAB:** Total Sales Amount = 4,05,207.00, has higher units and less price. Effecting inventory with higher quantity.

Insights from sales vs purchases bar graph:

- **Highest Sales:** January (₹14,755,757) has the highest sales, followed by February (₹14,191,661).
- **Low Purchase Months:** June and July have relatively lower purchase amounts compared to other months.
- **Profitable Months:** April, June, July, September, October, and January were profitable months.
- **Negative Profits Months :** The months of May, November, December, February, and March report negative profits.
- **Seasonal Factors:** It's possible that there are seasonal variations in both sales and purchases that affect profitability.
- Many medicines might be on the edge of expiry as excessive stocking is being done to manage the demand throughout the year, will be further analyzed with difference between purchase stock and sales stock.
- The company has inconsistent profitability, with alternating months of profit and loss, suggesting fluctuating demand, purchasing inefficiencies, or other operational challenges. The organization is running at minimal profits with respect to the purchase data.
- Over-purchasing in certain months (like November and February) with low returns or sales can suggest potential inefficiencies in inventory management.
- The profits are dipping over time. The profits are better in the first quarter and continue to perform poorly over the later quarters.

Identifying hotspots for establishing an outlet

- 2 locations (Asilmetta and Arilova) are suitable for relocation.
- Denser availability of hospitals and medical stores can be found in these locations.
- The city comes under Tier 1 city with higher elderly population. The hotspots are densely populated in the city.
- The location is accessible via major roads, highways, or public transport, making it easier for customers and for receiving supplies.
- The locations are proximate to the distributors and pharmacies.
- New healthcare infrastructure is being developed in these zones which may present growth opportunities in future.
- They are untapped markets at present as they are currently being developed as health zones.