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CAPSTONE PROJECT

FINAL SUBMISSION REPORT

Title : - Analysis of Jindal Medical Store's Business Challenges and Solutions

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CONTENTS

1. EXECUTIVE SUMMARY

This report presents a detailed analysis of the operations of Jindal Medical Store, a local pharmacy located in Palwal, focusing on identifying and addressing key challenges to enhance operational efficiency and profitability. The primary issues affecting the store include the management of expired medicines, delays in customer payments, and inefficiencies in inventory tracking. The objective of this project was to utilize data-driven methods to analyze sales trends, inventory performance, and payment behaviors, ultimately providing actionable insights and recommendations to improve the pharmacy's overall performance.

Over a period of two months, from September to October 2024, extensive data collection and analysis were conducted. The data included essential points such as medicine names, quantities sold, revenue, payment statuses, stock levels, and profit margins. The analysis revealed critical patterns, such as the high demand for certain medicines like Montair-LC and Pantop 40mg, which contributed significantly to revenue, and areas where inventory mismanagement led to stockouts or overstocking. Additionally, delayed customer payments were identified as a major constraint, creating cash flow issues and limiting the store's ability to replenish essential stocks on time.

The findings emphasized the need for systematic solutions to address these challenges. Expired medicines were found to be a recurring issue, resulting in financial losses and impacting trust among customers. Delayed payments further exacerbated cash flow problems, while gaps in inventory management disrupted the store’s ability to meet customer demands efficiently. Based on the analysis, recommendations were developed to optimize inventory management by implementing a real-time tracking system, incentivize timely payments to improve cash flow, and utilize sales data to align stock levels with demand trends effectively.

This project provided significant value both to Jindal Medical Store and to me as a student. It allowed me to apply my knowledge of data analysis and business management in a practical scenario, while offering the pharmacy actionable strategies to address its operational challenges. By adopting these recommendations, the store can improve customer satisfaction, minimize financial losses, and boost its overall profitability, ensuring sustainable growth in an increasingly competitive market. This report underscores the importance of leveraging data-driven decision-making to drive efficiency and success in small businesses like Jindal Medical Store.

2. DETAILED ANALYSIS PROCESS EXPLANATION

To create an effective data management framework for Jindal Medical Store, a systematic approach was undertaken, involving the following steps:

a. **Data Identification :-** The initial step focused on identifying critical data points required to address the store's operational challenges, including expired medicines, delayed payments, and inventory inefficiencies. The selected data points encompassed the purchase date, medicine name, type, quantity, M.R.P., selling price, cost price, margin, revenue, payment status (paid/credit), profit, open stock + incoming, sales, and remaining stock.

These data elements were essential to gain a comprehensive understanding of sales patterns, payment flows, and stock dynamics, laying the foundation for informed decision-making.

b. **Data Collection :-** The second step involved gathering accurate and relevant data is critical for deriving meaningful insights. At Jindal Medical Store, the data collection process focused on obtaining detailed information about frequently sold medicines to ensure a targeted and practical analysis.

   Considering the wide range of medicines available, we selected ten high-demand products that reflect the store's daily operations. These medicines, including Montair-LC, Amoxyclav 625mg, Calpol-500mg, Pantop 40mg, Cetirizine-10mg, Bricarex A, Wikoryl DS, Betnovate-C, Volini Gel, and Moov, were chosen based on their consistent sales performance and importance in meeting customer needs.

   Data points were meticulously collected and this comprehensive dataset provided insights into various operational aspects, including inventory flow, sales trends, and payment behavior. The two-month period from September 1, 2024, to October 26, 2024, was chosen to capture patterns across a sufficient timeframe, accounting for weekly cycles and potential seasonal variations. By focusing on commonly sold medicines and maintaining detailed records, the data collection process ensured a robust foundation for subsequent analysis and strategy development.

c. **Data Analysis :-** Analyzing the collected data was a crucial step to extract meaningful insights:

- **Stock Analysis**: Monthly stock data for September and October highlighted trends in initial stock, incoming stock, and remaining inventory, helping identify discrepancies in supply and demand.
- **Sales Performance**: By reviewing sales quantities, high-demand items such as Montair-LC and Pantop 40mg were identified, along with moderate performers like Amoxyclav 625mg, providing a clearer picture of product popularity.
- **Profit Trends**: Daily profit data for both months revealed which medicines contributed significantly to overall profitability and highlighted areas for potential margin improvement.

- **Payment Insights**: Payment records (paid vs. credit purchases) were analyzed to pinpoint issues with delayed payments, while comparisons of revenue and profit clarified the effect of pricing and sales strategies.
- **Expired Medicines**: A dedicated analysis table was created to assess stock nearing expiration during September and October, offering actionable insights to minimize wastage.

Graphs and tables were developed for each aspect, offering a visual representation of trends and outcomes, aiding in identifying key business strengths and weaknesses.

d. Data Design :- Based on the findings, a tailored design was developed to address the store's operational hurdles. This included strategies to optimize inventory management by preventing overstocking and monitoring expiration dates more effectively. Payment-related issues were tackled by suggesting improved processes for managing credit purchases and enhancing cash flow.The design also emphasized prioritizing high-demand to maintain stock levels and boost profitability. Promotional strategies were recommended for low-demand items, alongside pricing adjustments to balance revenue and sales volume.

By following this structured process, Jindal Medical Store gained a data-driven framework to streamline its operations, reduce waste, and achieve steady growth while improving customer satisfaction.

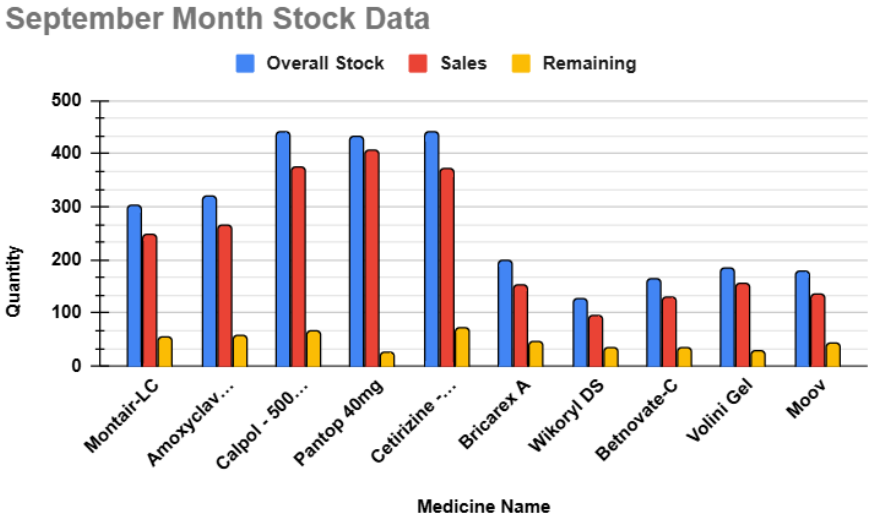
3. RESULTS AND FINDINGS

3.1 STOCK ANALYSIS :-

a.) September Month Stock Analysis :-

September Month			
Medicine Name	**Overall Stock**	**Sales**	**Remaining**
Montair-LC	301	246	55
Amoxyclav 625mg	319	263	56
Calpol - 500mg	439	375	64
Pantop 40mg	432	407	25
Cetirizine - 10mg	440	370	70
Bricarex A	198	152	46
Wikoryl DS	127	93	34
Betnovate-C	163	130	33
Volini Gel	183	156	27
Moov	177	135	42

The September stock analysis reveals both strong sales performance and areas for inventory optimization. While high-demand medicines like Montair-LC, Amoxyclav 625mg, and Calpol-500mg showed significant sales, the stock levels of Cetirizine-10mg and Calpol-500mg were notably higher than required, with remaining stocks of 70 and 64 units, respectively. This overstocking could lead to inefficiencies and potential wastage, particularly with slower-moving items like Bricarex A and Wikoryl DS, which had higher remaining stock compared to sales. The analysis highlights the importance of aligning stock levels with actual demand trends to avoid excess inventory and better manage resources, directly addressing the inventory management issue mentioned in the problem statement.

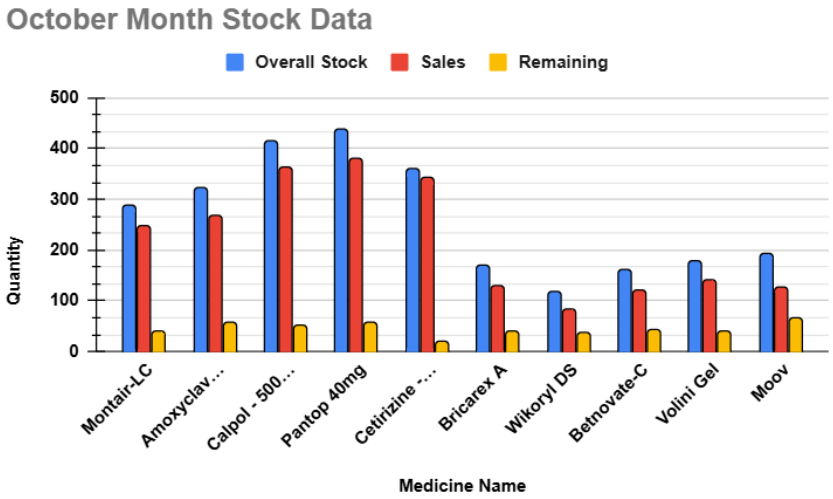


The September stock data shows that Montair-LC, Amoxyclav 625mg, and Calpol 500mg have high sales with efficient stock levels, while Cetirizine-10mg has excess stock. Medicines like Bricarex A, Wikoryl DS, and Moov are slow-moving, indicating overstocking. This analysis suggests the need for better inventory alignment to optimize sales and minimize waste, supporting the goal of improving stock management in the pharmacy.

b.) October Month Stock Analysis :-

October Month			
Medicine Name	**Overall Stock**	**Sales**	**Remaining**
Montair-LC	286	248	38
Amoxyclav 625mg	322	266	56
Calpol - 500mg	414	362	52
Pantop 40mg	437	381	56
Cetirizine - 10mg	360	341	19
Bricarex A	168	129	39
Wikoryl DS	118	82	36
Betnovate-C	161	120	41
Volini Gel	179	140	39
Moov	192	126	66

The table for October Month Stock highlights the overall stock, sales, and remaining quantities of medicines at Jindal Medical Store. High-demand medicines like Pantop 40mg (381 sales) and Calpol-500mg (362 sales) performed exceptionally well, contributing to significant inventory turnover. However, medicines like Wikoryl DS (82 sales) had low sales relative to overall stock, leading to higher remaining quantities. Cetirizine-10mg showed the lowest remaining stock (19), indicating potential stockout risks. This analysis emphasizes the need for better inventory management to prevent overstocking and stockouts.



The October Month Stock Data chart visually represents overall stock, sales, and remaining stock. Medicines like Pantop 40mg and Calpol-500mg have high overall stock and sales, with minimal remaining inventory, reflecting effective stock movement. Conversely, Wikoryl DS and Moov show lower sales compared to their stock levels, leading to higher remaining quantities. The chart highlights inefficiencies in inventory alignment, which could result in overstocking of slow-moving products and financial losses due to expired medicines.

3.2 SALES ANALYSIS :-

Date	Day	Name of Medicine	Category of Medicine	Quantity (strip)	M.R.P (strip)	Cost Price (per strip)	Selling Price (per strip)	Payment Status
9/1/2024	Sunday	Montair-LC	Tablet	10	₹370.00	₹293.40	₹325.00	Paid
9/1/2024	Sunday	Amoxyclav 625mg	Tablet	13	₹204.00	₹122.20	₹136.00	Paid
9/1/2024	Sunday	Calpol - 500mg	Tablet	18	₹14.00	₹9.80	₹12.00	Credit Purchased
9/1/2024	Sunday	Pantop 40mg	Tablet	9	₹165.00	₹135.30	₹144.00	Paid
9/1/2024	Sunday	Cetirizine - 10mg	Tablet	17	₹21.00	₹11.55	₹14.00	Paid
9/1/2024	Sunday	Bricarex A	Syrup	2	₹120.00	₹80.40	₹94.00	Credit Purchased
9/1/2024	Sunday	Wikoryl DS	Syrup	4	₹100.00	₹69.45	₹82.00	Paid
9/1/2024	Sunday	Betnovate-C	Ointment	8	₹70.00	₹53.20	₹60.00	Credit Purchased
9/1/2024	Sunday	Volini Gel	Ointment	11	₹265.00	₹198.75	₹225.00	Paid
9/1/2024	Sunday	Moov	Spray	7	₹320.00	₹262.40	₹280.00	Credit Purchased
9/2/2024	Monday	Montair-LC	Tablet	10	₹370.00	₹293.40	₹325.00	Paid
9/2/2024	Monday	Amoxyclav 625mg	Tablet	7	₹204.00	₹122.20	₹136.00	Paid
9/2/2024	Monday	Calpol - 500mg	Tablet	16	₹14.00	₹9.80	₹12.00	Credit Purchased
9/2/2024	Monday	Pantop 40mg	Tablet	17	₹165.00	₹135.30	₹144.00	Paid
9/2/2024	Monday	Cetirizine - 10mg	Tablet	3	₹21.00	₹11.55	₹14.00	Credit Purchased
9/2/2024	Monday	Bricarex A	Syrup	3	₹120.00	₹80.40	₹94.00	Credit Purchased
9/2/2024	Monday	Wikoryl DS	Syrup	3	₹100.00	₹69.45	₹82.00	Credit Purchased
9/2/2024	Monday	Betnovate-C	Ointment	6	₹70.00	₹53.20	₹60.00	Paid
9/2/2024	Monday	Volini Gel	Ointment	6	₹265.00	₹198.75	₹225.00	Paid
9/2/2024	Monday	Moov	Spray	2	₹320.00	₹262.40	₹280.00	Paid
9/3/2024	Tuesday	Montair-LC	Tablet	7	₹370.00	₹293.40	₹325.00	Paid
9/3/2024	Tuesday	Amoxyclav 625mg	Tablet	16	₹204.00	₹122.20	₹136.00	Paid

This sample from the master data at Jindal Medical Store captures key sales information for three days in September 2024. Data points include the date, day of the week, medicine name, category, quantity sold, M.R.P., cost price, selling price, and payment status (paid/credit). This information can be used to analyze sales trends, calculate profit margins, and identify potential cash flow issues related to credit purchases.

SALES		
Medicine Name	**Mean (wrt week)**	**Mean (wrt medicines)**
Montair-LC	61.75	49.4
Amoxyclav 625mg	66.125	52.9
Calpol - 500mg	92.125	73.7
Pantop 40mg	98.5	78.8
Cetirizine - 10mg	88.875	71.1
Bricarex A	35.125	28.1
Wikoryl DS	21.875	17.5
Betnovate-C	31.25	25
Volini Gel	37	29.6
Moov	32.625	26.1

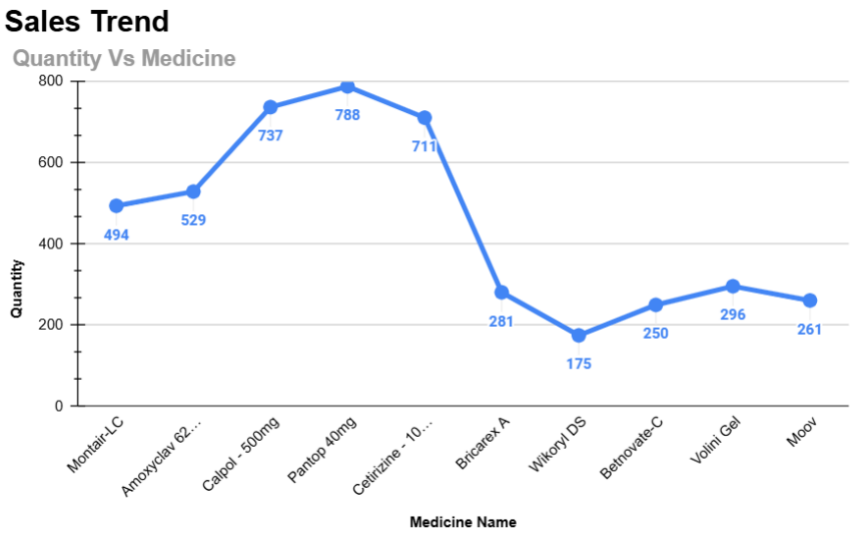
This table presents the average sales of 10 medicines across two metrics: mean sales per week and mean sales compared to other medicines. Calpol-500mg and Pantop 40mg show the highest average sales both weekly and relative to other medicines. Montair-LC and Amoxyclav 625mg also have relatively high average sales. Medicines like Bricarex A and Wikoryl DS have lower average sales compared to others. This data can be used to understand sales trends, identify top-selling products, and optimize inventory management by prioritizing stock for high-demand medicines.

3.3 QUANTITY SOLD ANALYSIS :-

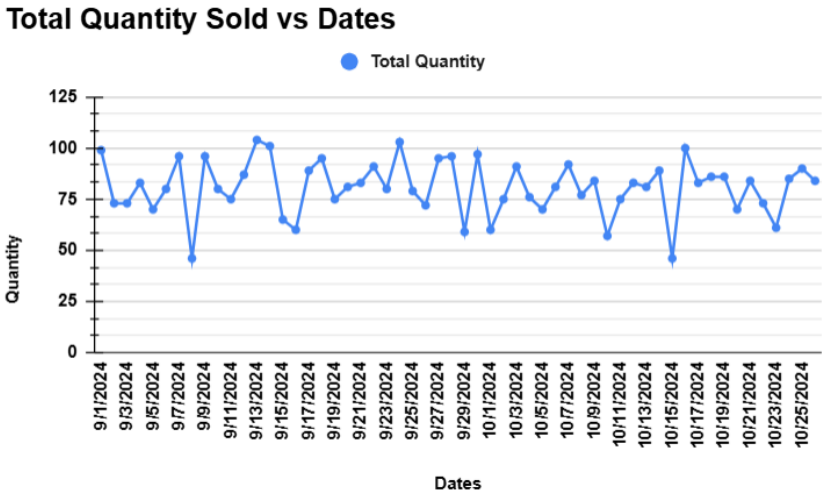
Medicine Name	Total Quantity (per strip)	Cummulative
Montair-LC	494	10.92%
Amoxyclav 625mg	529	11.70%
Calpol - 500mg	737	16.30%
Pantop 40mg	788	17.43%
Cetirizine - 10mg	711	15.72%
Bricarex A	281	6.21%
Wikoryl DS	175	3.87%
Betnovate-C	250	5.53%
Volini Gel	296	6.55%
Moov	261	5.77%
	4522	100.00%

This table provides the total quantity sold (per strip) for the 10 medicines. Calpol-500mg and Pantop 40mg, which previously showed high average sales in the mean sales analysis, also exhibit the highest sales volumes here, accounting for 16.30% and 17.43% of the total quantity sold, respectively. This reinforces their position as top-selling products. Montair-LC and Amoxyclav

625mg, also identified as high-selling medicines in the previous analysis, maintain significant sales volumes. Medicines like Bricarex A and Wikoryl DS, which had lower average sales, also demonstrate lower sales volumes here. This combined analysis confirms the consistent demand for certain medicines and provides further evidence to support inventory management decisions prioritizing high-demand products.



This chart visually represents the quantity sold for each of the 10 medicines. Pantop 40mg leads with the highest sales quantity, followed closely by Calpol-500mg. Montair-LC and Amoxyclav 625mg also show substantial sales. Cetirizine - 10mg has a high sales volume as well. On the other hand, Wikoryl DS has the lowest sales quantity, with Bricarex A and Betnovate-C also having relatively low sales. This visual representation clearly highlights the variations in sales performance across the different medicines and can be valuable for inventory management and sales planning.



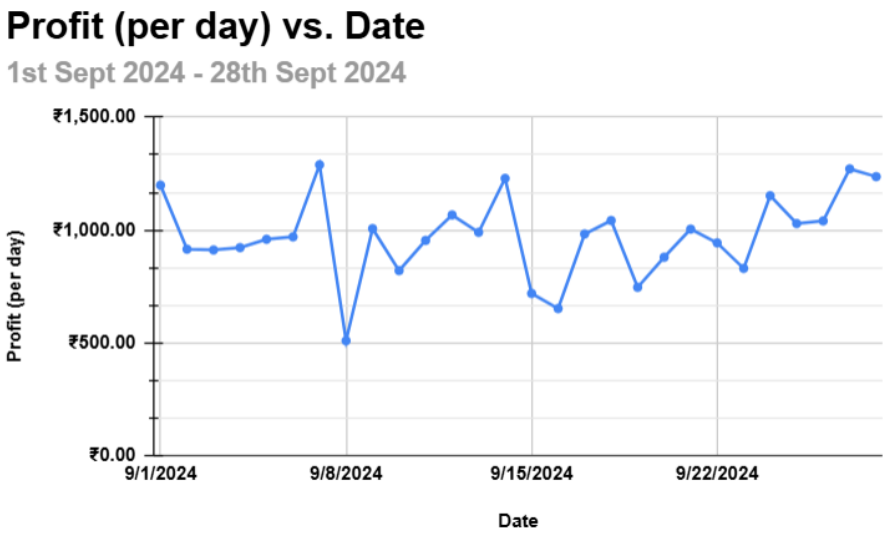
This chart visually represents the total quantity of medicines sold over the period from September 1st to October 26th, 2024. The chart shows a fluctuating pattern in daily sales, with some days exhibiting higher sales volumes than others. There doesn't seem to be a consistent upward or downward trend. This variability in daily sales aligns with the observations from the previous profit analysis, which showed significant daily fluctuations in profit.

This analysis indicates that factors influencing daily sales could include factors like:

- **Day of the week:** Sales might vary depending on the day of the week, with higher sales on weekdays compared to weekends.
- **Seasonal variations:** There might be seasonal fluctuations in demand for certain medications.
- **Local events or holidays:** Local events or holidays could impact foot traffic and, consequently, sales.

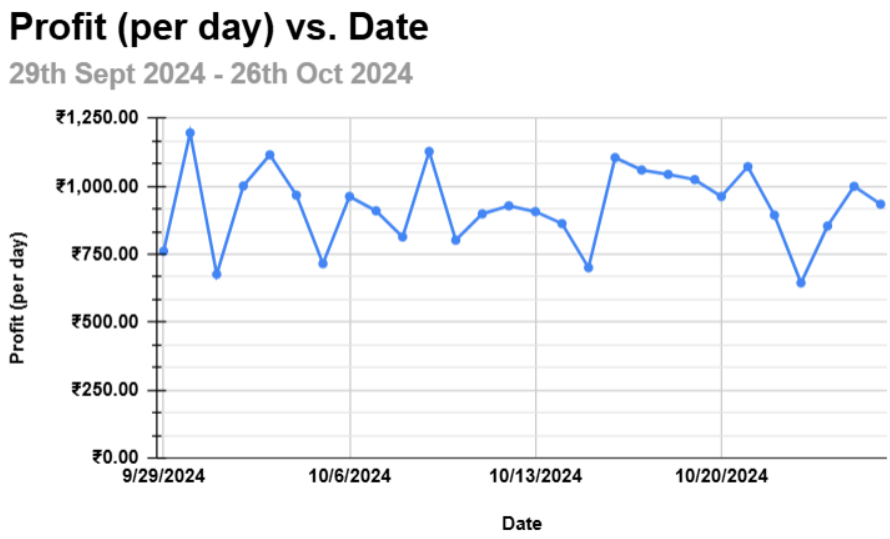
3.4 PROFIT ANALYSIS :-

a.) September Month Profit Analysis :-



The chart shows daily profit fluctuations throughout September. Profit levels appear to vary considerably, with some days showing significantly higher profits than others. There seems to be a trend of increasing profit towards the end of the month. This variability in daily profit could be influenced by factors such as sales volume, product mix, and credit payment collections. Comparing this profit data with the sales data from previous analyses (total quantity sold, sales trends) can help identify specific products or sales patterns that correlate with higher or lower profit days. Further investigation into factors like credit payment schedules and potential seasonality in medicine demand could provide deeper insights into profit fluctuations.

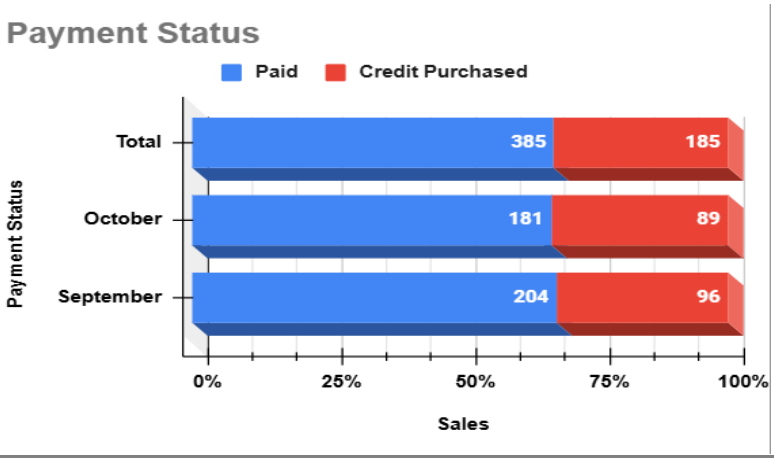
b.) October Month Profit Analysis :-



The chart shows daily profit fluctuations throughout October. Similar to the September data, we see significant day-to-day variation in profits. There are periods of higher profits followed by drops, suggesting factors like sales volume, product mix, and credit payment collections continue to influence daily profitability. Interestingly, there seems to be a slight downward trend in profit towards the end of October compared to the September data. Comparing this with the sales data from previous analyses can help pinpoint specific products or sales patterns associated with these profit variations.

3.5 PAYMENT STATUS ANALYSIS :-

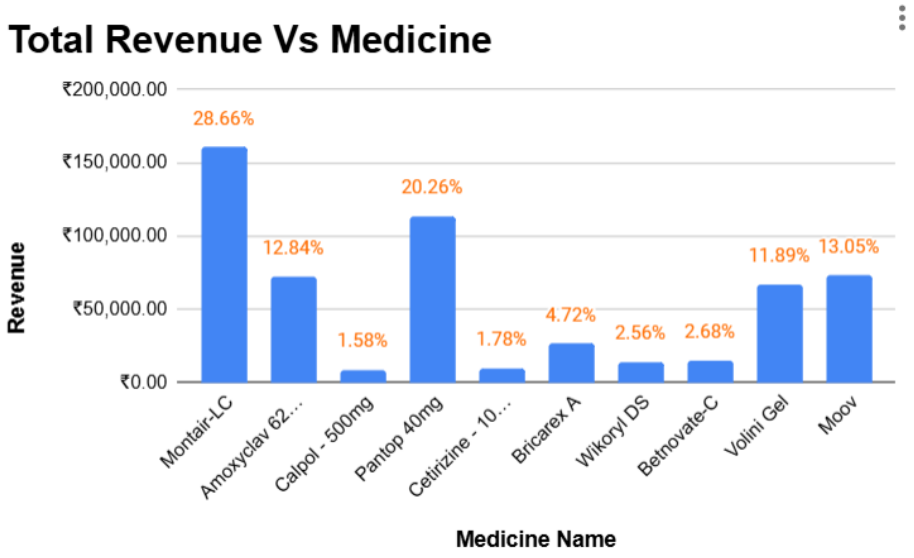
Payment Status	Paid	Credit Purchased
September	204	96
October	181	89
Total	385	185



This chart shows the breakdown of paid versus credit purchases for the total period, September, and October. Overall, a significant portion of transactions are paid in cash. However, credit purchases account for a substantial percentage, particularly in September. It's important to note that credit purchases can impact cash flow, potentially affecting the store's ability to restock inventory and meet operational expenses. Comparing this data with the profit analysis can help identify any correlation between credit sales and profit fluctuations. Further analysis of credit payment terms and the implementation of strategies to encourage timely payments can help mitigate the impact of credit sales on cash flow.

3.6 REVENUE ANALYSIS :-

a.) Total Revenue vs Medicine Analysis :-

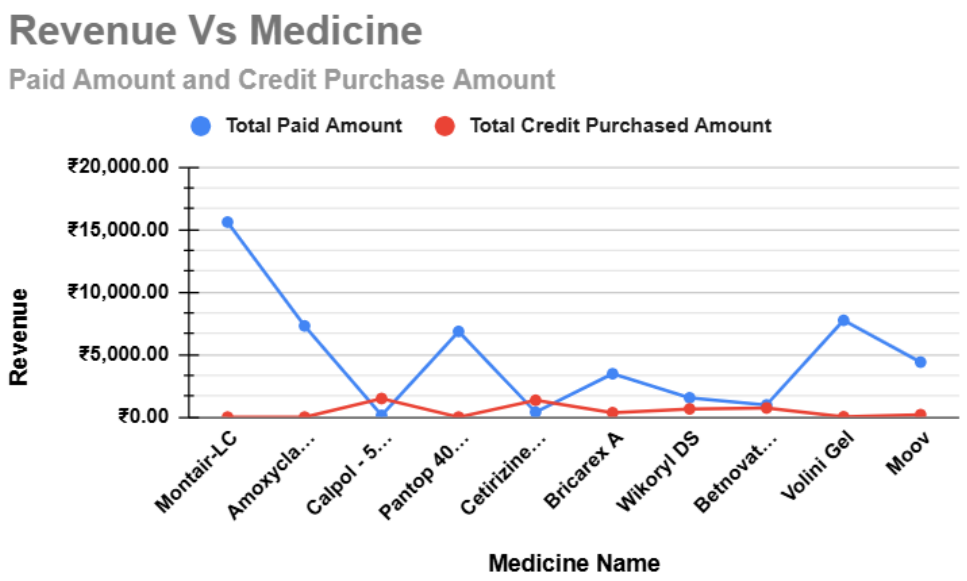


This chart visually represents the total revenue generated by each of the 10 medicines. Montair-LC stands out as the top revenue generator, contributing a significant portion to the overall revenue. Amoxyclav 625mg and Pantop 40mg also generate substantial revenue. On the other hand, medicines like Bricarex A, Wikoryl DS, and Betnovate-C have significantly lower revenue contributions.

This analysis corroborates the findings from previous analyses, where Montair-LC, Amoxyclav 625mg, and Pantop 40mg were identified as high-selling medicines. The chart visually emphasizes the revenue dominance of these products and highlights the need to focus on optimizing sales and inventory management for these high-revenue contributors.The chart also reinforces the need to analyze the sales performance of lower-revenue generating medicines and explore strategies to boost their sales, such as targeted promotions or price adjustments.

b.) Paid Amount vs Credit Purchased Amount Analysis :-

Medicine Name	Total Paid Amount	Cummulative Paid Amount	Total Credit Purchased Amount	Cummulative C.P. Amount
Montair-LC	₹15,610.40	32.23%	₹0.00	0.00%
Amoxyclav 625mg	₹7,300.20	15.07%	₹0.00	0.00%
Calpol - 500mg	₹136.40	0.28%	₹1,485.00	31.04%
Pantop 40mg	₹6,855.60	14.16%	₹0.00	0.00%
Cetirizine - 10mg	₹396.90	0.82%	₹1,345.05	28.12%
Bricarex A	₹3,468.00	7.16%	₹353.60	7.39%
Wikoryl DS	₹1,543.65	3.19%	₹652.60	13.64%
Betnovate-C	₹972.40	2.01%	₹727.60	15.21%
Volini Gel	₹7,743.75	15.99%	₹26.25	0.55%
Moov	₹4,400.00	9.09%	₹193.60	4.05%
Total	**₹48,427.30**	**100.00%**	**₹4,783.70**	**100.00%**



This chart visualizes the total paid amount and total credit purchase amount for each medicine. It appears that Montair-LC and Amoxyclav 625mg have the highest total paid amounts, indicating substantial cash sales for these medicines. Interestingly, while Calpol-500mg had high sales volumes in previous analyses, its total paid amount is relatively low, suggesting a higher proportion of credit purchases for this medicine. This chart provides valuable insights into the payment patterns for different medicines, which can be used to optimize inventory management and cash flow strategies. For example, the store might consider offering incentives for cash payments on medicines with a high proportion of credit purchases.

3.7 EXPIRY MEDICINES ANALYSIS :-

a.) September Month Data Analysis :-

September Month Status after 30th September 2024				
Month Last Date :-	9/30/2024			
Medicine Name	**Manufactured Date**	**Expiry Date**	**Days Remaining**	**Remaining Medicines**
Montair-LC	1/9/2024	2/27/2026	515	55
Amoxyclav 625mg	10/13/2023	9/20/2025	355	56
Calpol - 500mg	2/22/2024	12/11/2025	437	64
Pantop 40mg	6/28/2023	5/7/2025	219	25
Cetirizine - 10mg	5/23/2024	4/30/2026	577	70
Bricarex A	5/9/2024	4/18/2025	200	46
Wikoryl DS	1/13/2023	2/26/2025	149	34
Betnovate-C	8/19/2023	4/21/2025	203	33
Volini Gel	10/11/2023	6/21/2025	264	27
Moov	6/17/2023	5/14/2025	226	42

The data shows the remaining stock and expiry dates for 10 medicines as of September 30th, 2024. While the exact number of expired medicines in September is not explicitly stated, this information allows for proactive management of expiring stock. Medicines with shorter expiry durations, such as Wikoryl DS and Betnovate-C, require closer monitoring to minimize wastage. This analysis can be used to implement strategies like FIFO (First In, First Out) stock rotation to ensure that older stock is used first, reducing the risk of expiry. Additionally, comparing this data with sales trends and demand patterns can help optimize stock levels and minimize the risk of holding excess stock that may expire.

b.) October Month Data Analysis :-

October Month Status after 31st October 2024				
Month Last Date :-	10/31/2024			
Medicine Name	**Manufactured Date**	**Expiry Date**	**Days Remaining**	**Remaining Medicines**
Montair-LC	1/9/2024	2/27/2026	484	38
Amoxyclav 625mg	10/13/2023	9/20/2025	324	56
Calpol - 500mg	2/22/2024	12/11/2025	406	52
Pantop 40mg	6/28/2023	5/7/2025	188	56
Cetirizine - 10mg	5/23/2024	4/30/2026	546	19
Bricarex A	5/9/2024	4/18/2025	169	39
Wikoryl DS	1/13/2023	2/26/2025	118	36
Betnovate-C	8/19/2023	4/21/2025	172	41
Volini Gel	10/11/2023	6/21/2025	233	39
Moov	6/17/2023	5/14/2025	195	66

This table shows the remaining stock and expiry dates for 10 medicines as of October 31st, 2024. Compared to the September data, we can observe changes in remaining stock levels for some medicines. For instance, Montair-LC has a slightly lower remaining stock in October, indicating higher sales or potential stock adjustments. Medicines with shorter expiry durations, such as Wikoryl DS and Betnovate-C, continue to require close monitoring. This analysis can be used to refine stock management strategies, taking into account sales trends and expiry dates to minimize wastage and ensure optimal stock levels.

Key takeaways:

- **Stock Levels:** Some medicines like Montair-LC show a slight decrease in stock, indicating sales activity.
- **Expiry Monitoring:** Medicines with shorter expiry durations (Wikoryl DS, Betnovate-C) require ongoing attention.
- **Stock Management:** Analysis of stock levels and expiry dates alongside sales data can help optimize inventory and minimize wastage.

This ongoing analysis of expiry data is crucial for effective inventory management and minimizing losses due to expired medicines.

4. INTERPRETATION AND RECOMMENDATIONS

4.1 Interpretation of Results:

- **Expired Medicines:** The analysis of expiry data, combined with the profit analysis, highlights a significant concern regarding expired medicines. Not only does it lead to direct financial losses, as observed in the profit trends, but it also poses a risk to customer health and safety.

- **Delayed Customer Payments:** The payment status analysis indicated a significant proportion of credit purchases, which, as observed in the profit analysis, can lead to delayed payments and negatively impact cash flow. This can hinder timely restocking and affect overall business liquidity, potentially impacting the store's ability to meet demand and maintain profitability.

- **Inventory Management:** The analysis of sales data (quantity sold, sales trends) revealed inconsistencies in stock levels. Some high-demand medicines had low stock, potentially leading to stockouts and lost sales, as observed in the sales data. Conversely, some

medicines with lower demand had excessive stock, increasing the risk of expiry and tying up valuable capital.

- **Sales Performance:** The analysis identified Montair-LC, Amoxyclav 625mg, Calpol-500mg, and Pantop 40mg as high-selling medicines, as evidenced by the revenue analysis. However, there is room for improvement in the sales of other medicines like Bricarex A and Wikoryl DS.

- **Profitability Analysis:** The profit analysis showed significant daily fluctuations. While some days had high profits, others had lower profits. This variability can be attributed to factors like sales volume, product mix, and credit payment collections, as observed in the sales and payment data analysis.

- **Cash Flow Management:** The analysis highlighted the impact of credit sales on cash flow. Delayed payments can create financial constraints for the business, as observed in the profit analysis and the payment status analysis.

4.2. Recommendations :-

- **Expired Medicines:**
  - **a)** Implement a robust First-In, First-Out (FIFO) inventory management system.
  - **b)** Utilize technology like barcode scanners to track stock rotation effectively.
  - **c)** Conduct regular stock audits to identify and dispose of expired medicines safely.

- **Delayed Customer Payments:**
  - **a)** Offer incentives for cash payments, such as discounts or loyalty points.
  - **b)** Establish clear credit policies with defined payment terms and consequences for late payments.
  - **c)** Implement a system for tracking overdue payments and actively follow up with customers.
  - **d)** Consider offering payment options like digital wallets or online payment gateways for faster and more convenient transactions.

- **Inventory Management:**
  - **a)** Conduct regular stock audits to identify slow-moving and fast-moving items.
  - **b)** Utilize ABC analysis to categorize medicines based on their sales value and prioritize inventory management accordingly.
  - **c)** Implement a reorder point system to ensure timely restocking of high-demand items.
  - **d)** Leverage sales data to forecast demand and adjust stock levels accordingly.

- **Sales Performance:**
  - **a)** Focus marketing efforts on promoting high-demand medicines.
  - **b)** Consider introducing promotional offers or discounts on low-selling medicines to boost their sales.
  - **c)** Analyze customer preferences and identify potential new products to add to the inventory.

- **Profitability Analysis:**
  - **a)** Conduct a detailed analysis to identify factors contributing to profit fluctuations.
  - **b)** Explore pricing strategies to optimize profit margins on different products.
  - **c)** Implement cost-cutting measures where possible, such as negotiating better prices with suppliers.

- **Cash Flow Management:**
  - **a)** Implement stricter credit policies and actively pursue overdue payments.
  - **b)** Explore alternative financing options to manage cash flow, such as short-term loans or lines of credit.
  - **c)** Optimize inventory management to minimize the need for excessive working capital.

- **Customer Relationship Management:**
  - **a)** Implement a customer loyalty program to incentivize repeat business and build stronger customer relationships.
  - **b)** Collect customer feedback to understand their needs and preferences.
  - **c)** Provide excellent customer service to enhance brand reputation and attract new customers.

By implementing these recommendations, Jindal Medical Store can significantly improve its operational efficiency, enhance profitability, and better serve its customers. Regular monitoring, data analysis, and continuous adaptation will be crucial for sustained success.

5. CONCLUSIONS

This project aimed to analyze the operations of Jindal Medical Store in Palwal and identify key areas for improvement. Data analysis revealed several critical issues, including the management of expired medicines, the impact of delayed customer payments on cash flow, and inefficiencies in inventory tracking. The analysis identified high-demand medicines, the impact of credit sales on cash flow, and the presence of potential stockouts and overstocking. Furthermore, the analysis of daily sales data revealed significant fluctuations in sales volume, suggesting that factors like day of the week, local events, or seasonal variations might influence sales patterns.

Based on these findings, a set of recommendations was developed to address the identified challenges. These recommendations include implementing a robust inventory management system, incentivizing timely payments, optimizing stock levels, and improving customer service. By leveraging data-driven insights and implementing these strategies, Jindal Medical Store can enhance its operational efficiency, improve profitability, and better serve the needs of its customers. This project demonstrates the value of data-driven decision-making in achieving sustainable growth and success in the competitive healthcare market.

Key takeaways:

- Data-driven decision-making is crucial for improving business performance.
- Inventory management is critical for profitability and customer satisfaction.
- Efficient cash flow management is essential for business sustainability.
- Understanding and responding to sales fluctuations is key to optimizing operations.
- Continuous monitoring, data analysis, and adaptation are necessary for sustained success.

By regularly reviewing data, monitoring performance, and adapting strategies, Jindal Medical Store can continue to optimize its operations and achieve its business objectives.