

BUSINESS DATA MANAGEMENT CAPSTONE PROJECT

DIRECT-TO-CONSUMER MILKMAN BUSINESS EXPANSION: MAXIMIZING REVENUE AND EFFICIENCY

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EXECUTIVE SUMMARY

The project revolves around a small milk delivery business in Sultanpur, Uttar Pradesh, operated by Mr. Rajesh Dubey, who started the business three years ago.

His sales comprise various milk types (Type 1, Type 2, Type 3), where "Type 1", "Type 2" and "Type 3" cater to different quality preferences for customers, where "Type 3" denotes the highest quality milk. Additionally, sales include condensed milk and discounted offerings to local dairies.

The business faces *profitability challenges* as the milkman sells milk to dairy at lower prices instead of directly to customers, limiting profit margins and hindering growth. Additionally, there are constraints in expanding operations and reaching new markets.



Data Collection

The data for the sales and expenditure for three months was meticulously recorded.

The data was gathered directly from Mr. Rajesh over a three-month period through regular interactions or at specified intervals.

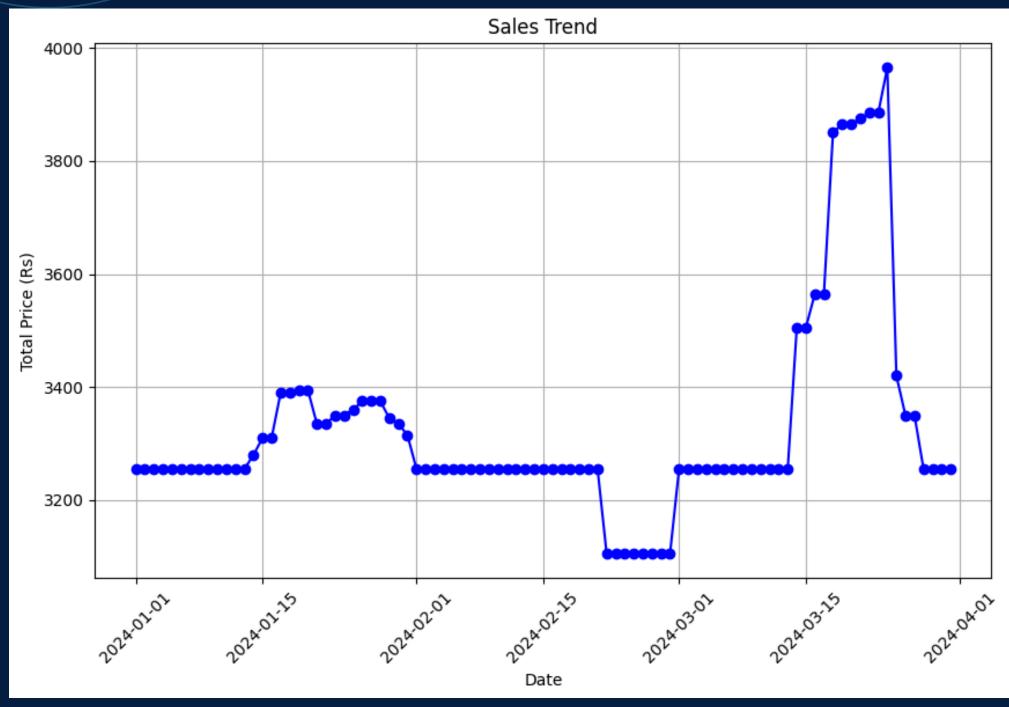
To organize and clean the data, we used Excel, making it easier to analyze and facilitating future data analysis.

	Α	В	С	D
	Month	Product	Quantity (Kg)	Rate (Rs/u
2	Jan-24	Chooni+Pashu aahar+ Makka aata	775	30
3	Jan-24	Wheat Straw	1550	10
4	Jan-24	Calcium Powder and other supplements		
4	Jan-24	Jan-24 Medicines		
6	Jan-24	Petrol		
7	Jan-24	Labour Charge		
8	Jan-24	Fertlizer+Water		
9	Jan-24	Berseem (seed)		
10	Jan-24	Makkhan Grass (seed)	0.02	
11				
12	Feb-24	Chooni+Pashu aahar+ Makka aata	725	30
13	Feb-24	Wheat Straw	1450	10
14	Feb-24	Calcium Powder and other supplements		
15	Feb-24	Medicines		
16	Feb-24	Petrol		
17	Feb-24	Labour Charge		
18	Feb-24	Fertlizer+Water		
19	Feb-24	Berseem (seed)		
50	Feb-24	Makkhan Grass (seed)	0.02	
1				
	Mar-24	Chooni+Pashu aahar+ Makka aata	775	30
,	Mar-24	Wheat Straw	1550	10
	1ar-24	Calcium Powder and other supplements		
	r-24	Medicines		
	74	Petrol		
		Labour Charge		
		Fertlizer+Water		
		Berseem (seed)		
		kkhan Grass (seed)	0.02	



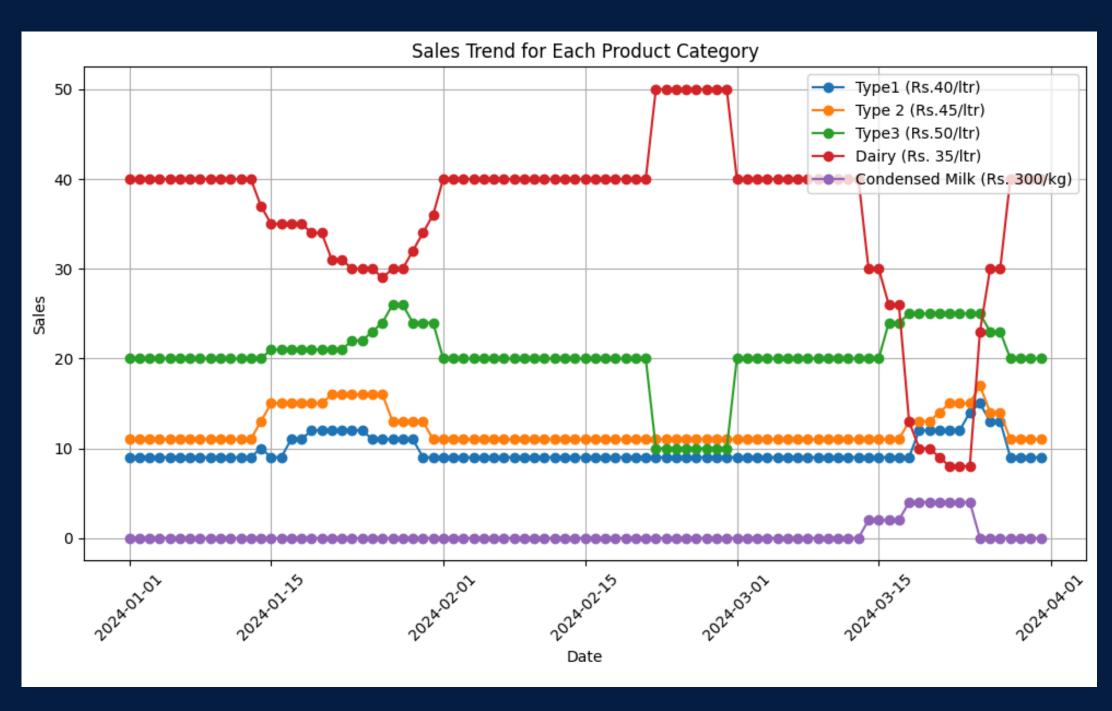
Data Analysis Sales Analysis

- January: Stable sales until mid-month, with notable peaks on January 17th, 18th, and 26th due to the wedding season.
- February: Consistent sales until February 21st, followed by a decline attributed to reduced demand from hospitals.
- March: Fluctuating sales with steady revenue until mid-month, followed by a significant surge from March 14th to March 24th due to the festival season, particularly Holi.



Data Analysis Sales Analysis

- Sales to dairy at Rs. 35 per litre consistently dominate revenue, despite fluctuations in other categories.
- Type 2 milk sales exhibit a notable upward trend, indicating sustained demand and revenue growth.
- Type 1 and Type 3 milk sales remain stable, reflecting consistent customer demand.
- The analysis indicates that condensed milk experiences a surge in demand during festive seasons, suggesting a seasonal pattern in consumer preferences.



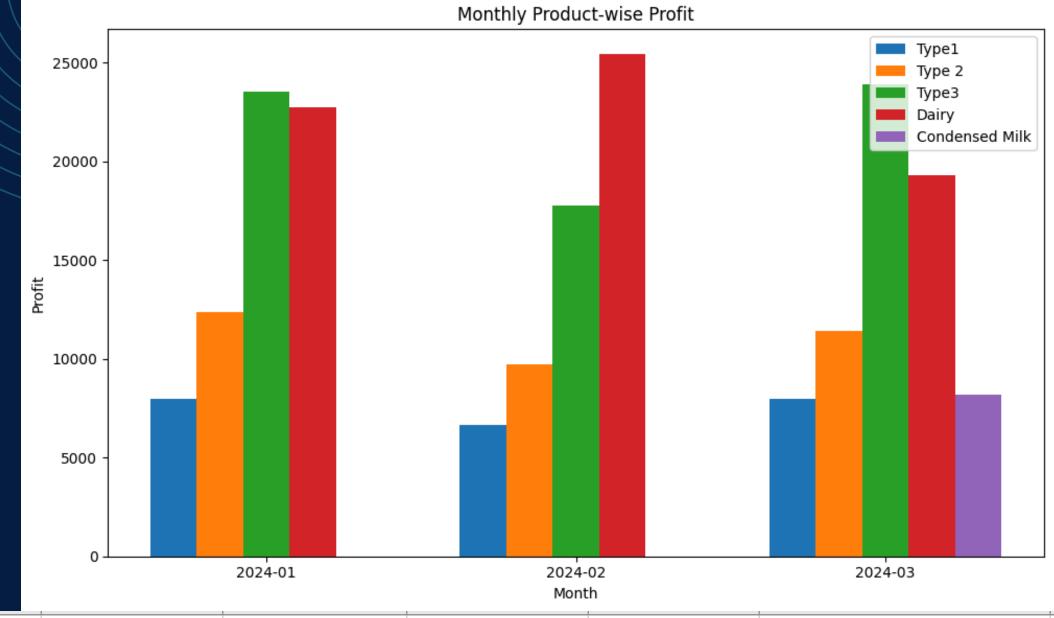
Data Analysis Profit Analysis

- January: The profit for January was Rs. 53,365, indicating a healthy level of profitability.
- February: Profit decreased slightly to Rs. 46,625 compared to January, likely due to reduced sales from hospitals towards the end of the month.
- March: Profit increased to Rs. 57,515, surpassing both January and February, indicating an improvement in business performance.



Data Analysis Profit Analysis

- The profit analysis was conducted utilizing a methodology tailored to the specific context of the business, where no direct purchase costs were incurred. Instead, monthly expenses were allocated to determine the production cost of milk.
- With product-wise revenue and expenses identified, the profitability analysis proceeded by calculating the product-wise profit for each month.



Month	Type1 Revenue	Type 2 Revenue	Type3 Revenue	Dairy Revenue	Condensed Milk Revenue
2024-01	12480	18225	33150	38780	0
2024-02	10440	14355	25000	43400	0
2024-03	12520	16830	33700	32935	10800
Month	Type1 Expenses	Type 2 Expense	Type3 Expense	Dairy Expense	Condensed Milk Expense
2024-01	4524	5872.5	9613.5	16066	0
2024-02	3784.5	4625.5	7250	17980	0
2024-03	4538.5	5423	9773	13644.5	2610
Month	Type1 Profit	Type 2 Profit	Type3 Profit	Dairy Profit	Condensed Milk Profit
2024-01	7956	12352.5	23536.5	22714	0
2024-02	6655.5	9729.5	17750	25420	0
2024-03	7981.5	11407	23927	19290.5	8190

Findings

- Rs 50 milk (Type 3) sales remained relatively stable throughout the period, with minor fluctuations observed.
- Rs 45 milk (Type 2) sales exhibited a notable upward trend, indicating sustained and growing demand for this product.
- Rs 35 milk (which is sold to Dairy) is consistently profitable due to its stable sales volume, which covers production costs and generates profit.
- Conversely, Rs 40 milk (Type1) is experiencing less profit, primarily attributed to lower sales quantities. The lower demand for Rs 40 milk affects its ability to cover production costs, resulting in less profits despite its higher price point compared to Rs 35 milk.
- As for condensed milk, its profitability fluctuates due to its seasonal nature. Since condensed milk is likely to have peak demand during specific times of the year, its production and pricing strategies should align with seasonal demand patterns.

Recommendations

It is recommended to adjust pricing based on cost analysis. Increasing the price by a small amount may not significantly bother the customer, but it can certainly increase profitability.

Given the absence of door-to-door delivery options for the women farmers, Mr. Rajesh can expand his product range & boost revenue by leveraging his existing distribution network.

Optimize Sales to Dairy

Profit-Driven
Pricing

Explore alternative approaches other than dairy: partnering with local cafes, restaurants, and supermarkets

Quality Control Enhancement

Support Local Women Farmers

Seasonal Demand
Optimization Strategy

Regularly inspect product quality, train staff in milk production, processing, and handling, and set up a customer feedback system.

Pricing strategies should match seasonal demand patterns. Adjusting prices during peak seasons to capitalize on increased demand can maximize profitability.