

DATA ANALYSIS FOR BUSINESS

PRESENTATION BY ANNA NTO M

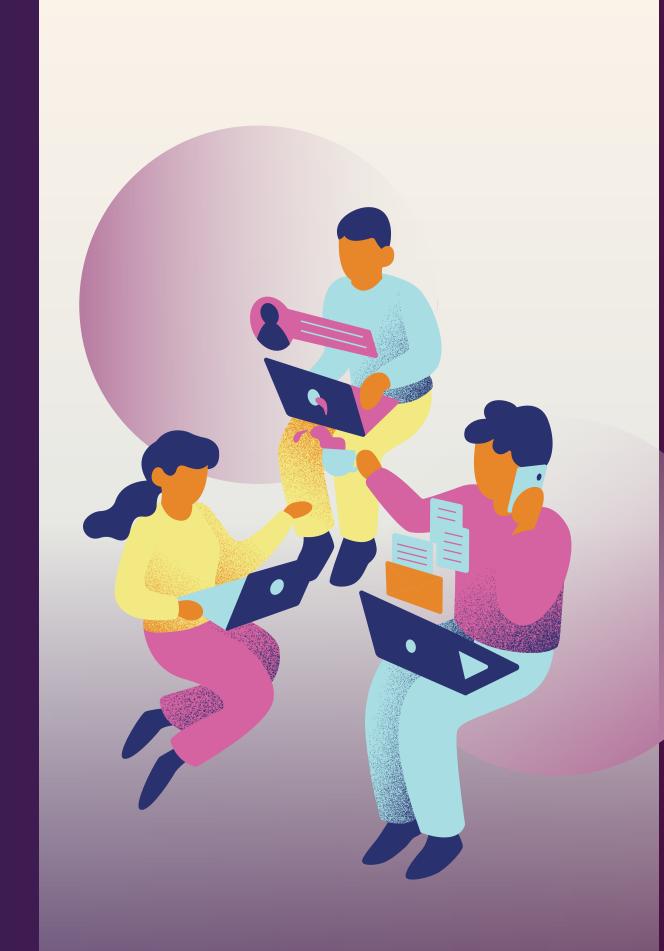




OBJECTIVES

The metrics that you need to develop are:

- 1. What is the daily sales price per unit?
- 2. What is the average unit sales price of this product?
- 3. What is the daily % gross profit?
- 4. What is the daily % gross profit per unit?
- 5. Pick any 3 periods during which this product was on promotion/special:





INSIGHTS SUMMARY

Pricing

Moved from unstable/promotion-heavy to more consistent and higher pricing.

Profitability

Improved significantly after 2015; fewer loss-making days observed.

Cost vs. Price

Early data shows potential misalignment; corrected over time.

Strategy Shift

Possibly better pricing discipline and cost control in later periods.



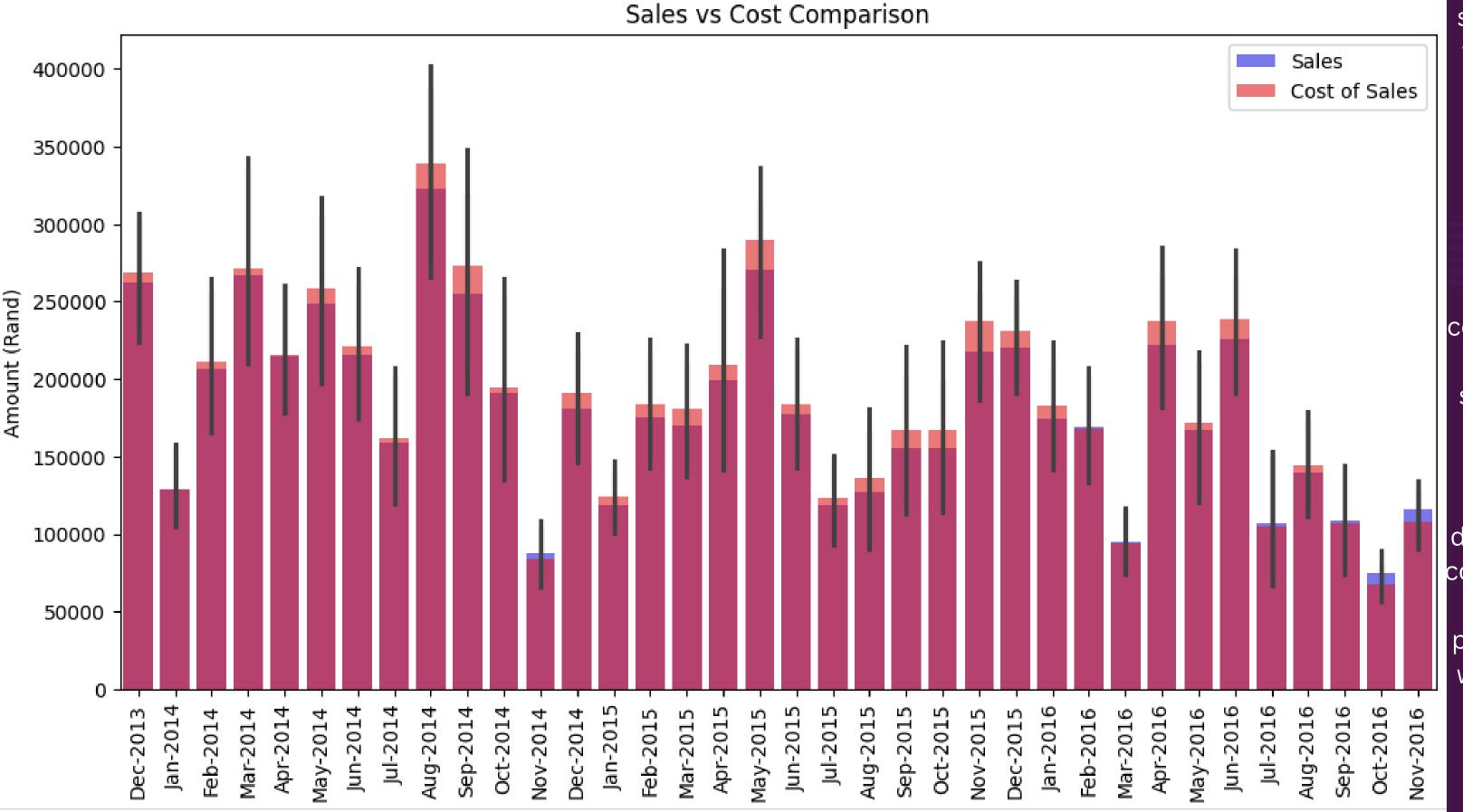
PRICE ELASTICITY

- When the quantity sold spikes it was during the times, where promotions were effective in driving demand.
- The scatter points form a steep downward trend, it suggests high elasticity—meaning that when prices increase, demand drops significantly, and vice versa.
- Price sensitivity varies over different months, it could indicate:
- Holiday-driven demand (higher elasticity during peak seasons).
- Stable demand across months (suggesting essential products).





SALES VS COST COMPARISON



#Sales and cost
typically follow a
parallel trend, but in
some periods, the gap
widens significantly—
indicating higher
profitability.

#Some months show strong profitability, where sales substantially exceed cost—this can be due to effective pricing strategies or seasonal demand spikes.

#Some periods show declining sales, despite costs remaining stable—this may highlight periods of low demand where stock and costs need to be better managed.



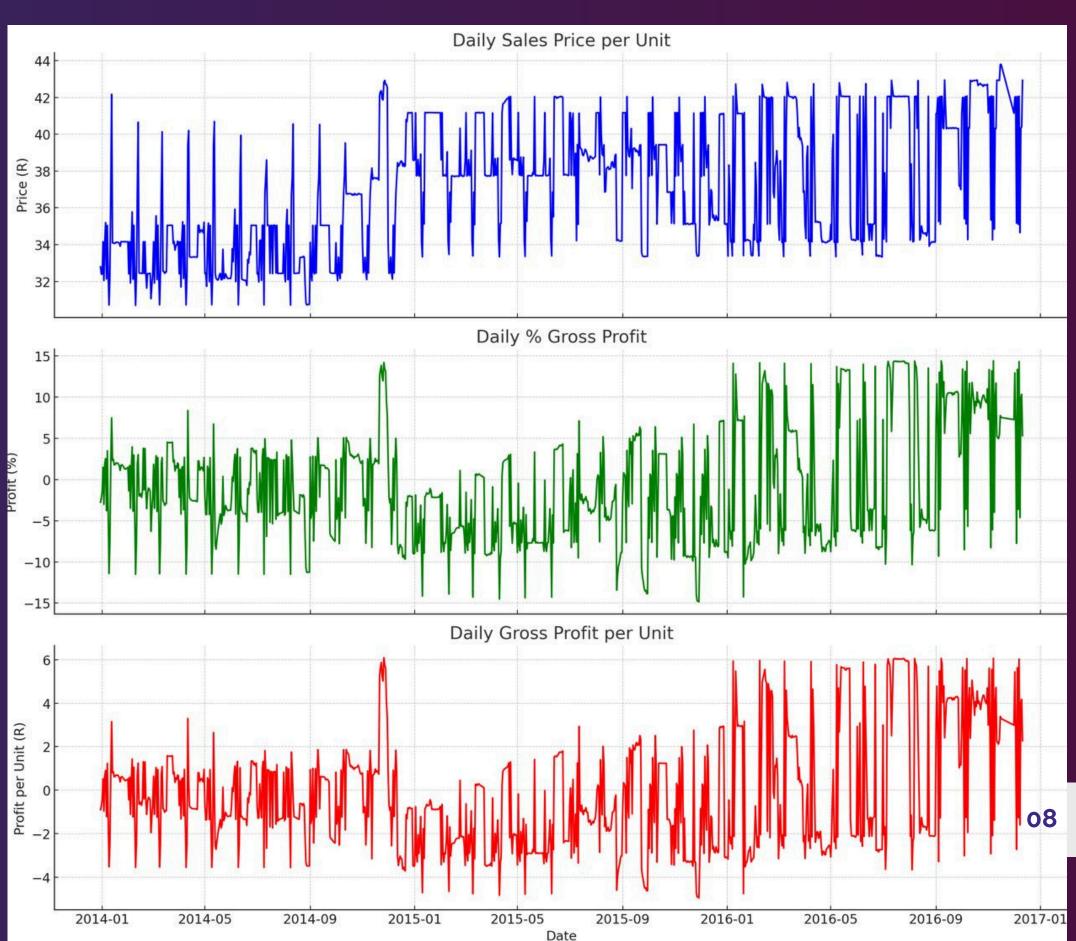
DAILY SALES PRICE

✓ 1. Daily Sales Price per Unit (Blue) Observations:

- 2014: Price was relatively stable in the range of R32–R36, with periodic sharp drops (likely promotions).
- 2015: A gradual shift upward in average price begins mid-year (hovering around R36–R40).
- 2016: Prices consistently trend higher, frequently reaching R42–R44.

Interpretation:

- The product underwent price increases over time, potentially due to demand strength or inflation.
 - The sharp dips are likely promotions or markdowns.
- The consistency in price after mid-2015 suggests better pricing control or standardization.



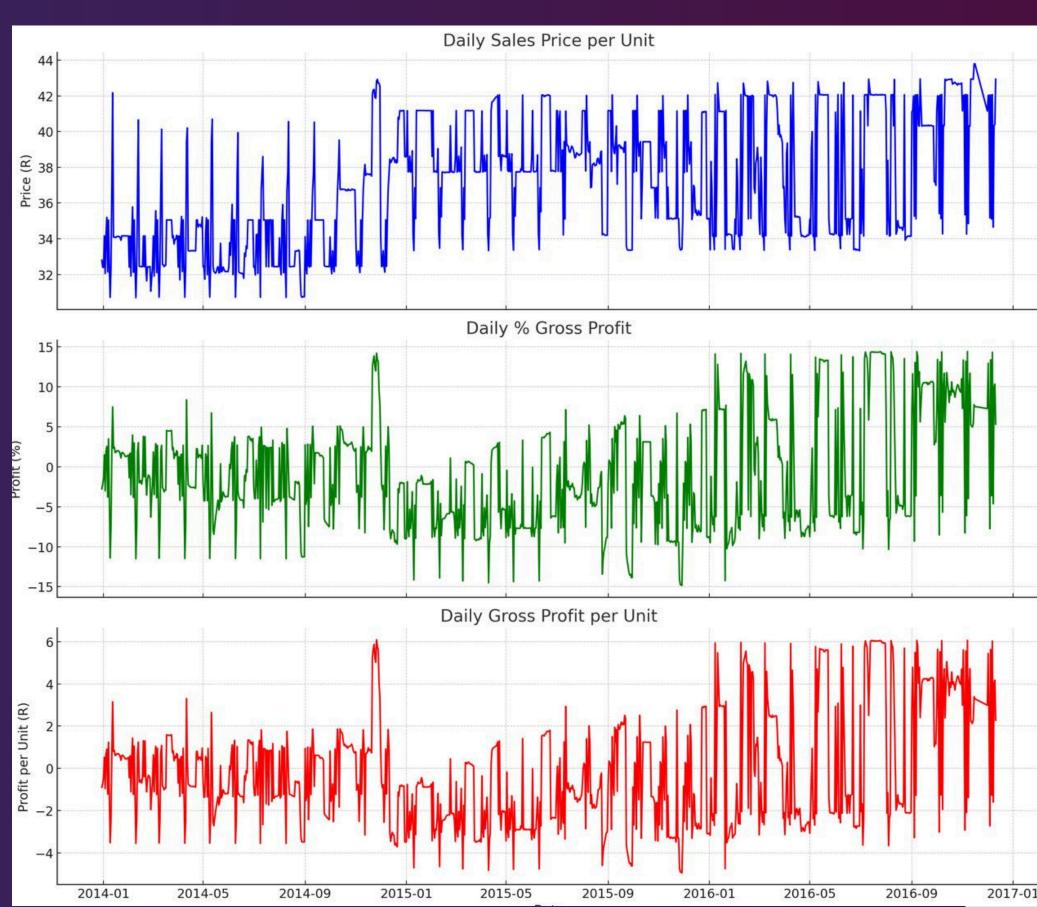


DAILY GROSS PROFITS

Daily % Gross Profit (Green)

Observations:

- Volatility is significant in 2014–2015, with frequent negative profit days (below 0%).
- Post-2015, there's an upward trend, with %
 Gross Profit mostly staying positive.
 Interpretation:
- Earlier in the period, cost of sales may have been too high relative to pricing.
 - As prices increased and perhaps costs stabilized, profitability improved by 2016.
- The company may have refined its cost control or pricing strategy mid-2015 onward.





DAILY GROSS PROFIT

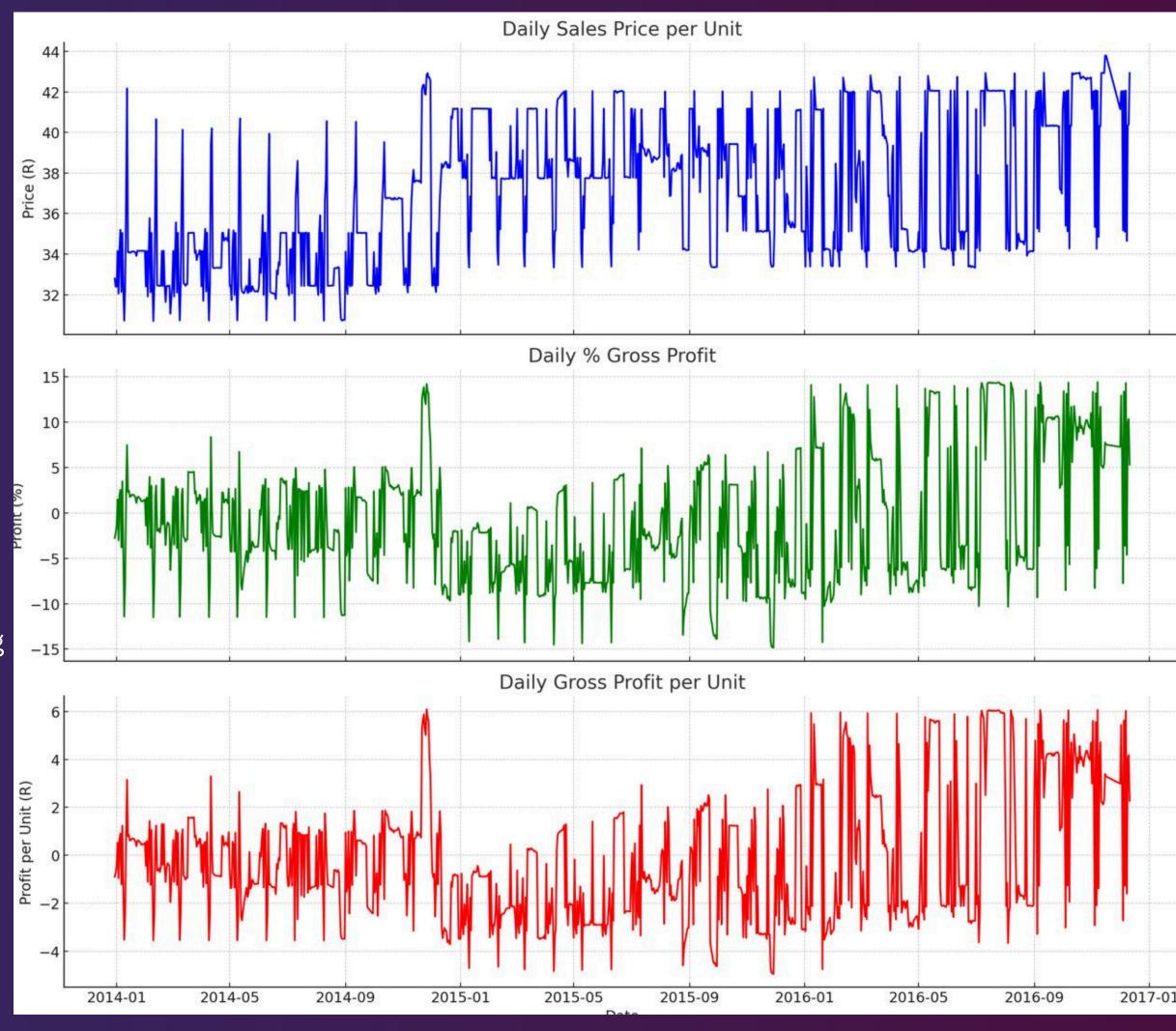
Gross Profit per Unit (Red)

Observations:

- Similar volatility to the % Gross Profit trend.
- In early 2014–2015, profit per unit often dips below zero (i.e., selling at a loss).
- From 2016 onwards, a visible shift upward—most values are positive, consistently above RO.

Interpretation:

- The business was likely losing money per unit during some promotions or poor cost periods.
 - 2016 marks a turning point: most units sold generated positive unit margins, indicating better financial health.
 - This aligns with the upward price trend and improved % gross margins.







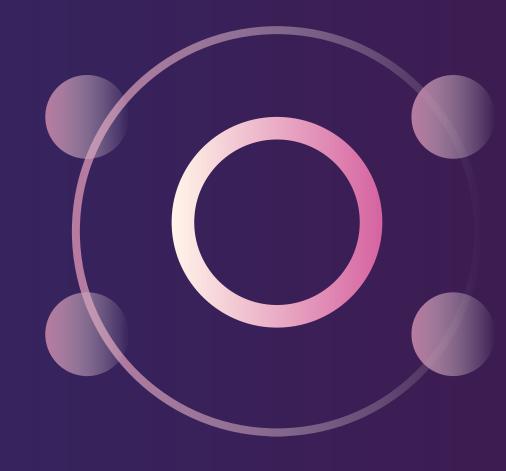
SALES ANALYSIS SUMMARY

1. Overall Sales Performance

- Total sales show an upward trend over time, with seasonal fluctuations.
- The highest sales months appear to coincide with peak shopping seasons.
- Some low-sales periods may indicate reduced demand or pricing inefficiencies.

2. Cost vs. Profitability Insights

- Gross profit margins fluctuate, revealing periods of high profitability and potential inefficiencies.
- Some months show a small gap between sales and cost, indicating tight profit margins.
- Promotional periods likely drive more sales but impact profitability.



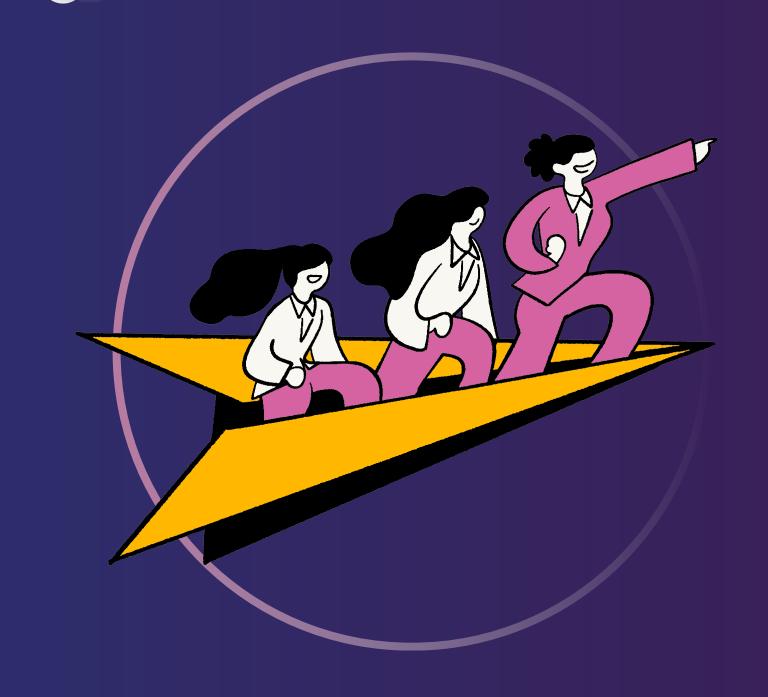
3. Price Elasticity and Demand

- Demand responds to price changes, but the degree of sensitivity varies.
- Some promotional pricing strategies lead to higher demand, while others have minimal impact.
- Products with inelastic demand may maintain steady sales even when prices change.

4. Seasonal and Trend-Based Insights

- Certain months consistently show high sales, suggesting seasonal demand patterns.
- Sales tend to spike in holiday periods, aligning with industry trends.
- Analyzing historical patterns can help forecast future sales trends.





ACTIONABLE RECOMMENDATIONS

- Optimize pricing strategies to balance sales volume and profit margins.
- Analyze cost fluctuations to identify potential inefficiencies.
- Refine promotions by identifying the bestperforming discount levels.
- Forecast future sales using historical data to prepare for peak seasons.



KPIS FOR ONGOING SALES MONITORING

- Sales Growth Measures the percentage increase or decrease in sales over a specific period.
- Lead Conversion Rate Tracks the percentage of leads that turn into actual sales.
- Customer Acquisition Cost (CAC) Calculates how much it costs to acquire a new customer.
- Average Deal Size Helps understand the typical revenue generated per sale.
- Sales Cycle Length Measures the average time it takes to close a deal.
- Customer Retention Rate Indicates how well your business retains customers over time.
- Quote-to-Close Ratio Shows the percentage of quotes that result in closed deals.
- Revenue per Sales Rep Evaluates individual sales performance.
- Sales Forecast Accuracy Compares projected sales to actual sales.
- Profit Margin Assesses the profitability of sales.



