

Dear Data Science Team Leader,

I have completed the initial exploratory data analysis on the provided sample sales data.

Here is a summary of the findings:

- The dataset contains 7,829 entries with 9 columns: transaction\_id, timestamp, product\_id, category, customer\_type, unit\_price, quantity, total, and payment\_type.
- The data types include object (string), float64, and int64.
- The unit\_price ranges from 0.19 to 23.99, with an average of 7.82. The quantity ranges from 1 to 4, with an average of 2.50. The total sales amount ranges from 0.19 to 95.96, with an average of 19.71.
- No null values are present in any of the columns.

Recommendations for Next Steps:

- Increase Data Volume:  
Gather data from multiple stores and over a more extended period to generalize insights.
- Refine Problem Statement:  
Define a more specific problem statement related to inventory management or sales optimisation.
- Feature Expansion:  
Identify additional features that could help in better understanding customer behaviour or product trends.

Best regards,  
Miguel Teixeira