Data Analyst Technical Prompt

Data Analyst - Technical Prompt

Thank you for your interest in Analytics at Comoto! This short project is designed to evaluate: ability to gather insight from data, technical familiarity, and communication/presentation skills.

Dataset: https://storage.googleapis.com/comoto-interview-data/ecom_data.csv

The dataset contains purchases made by customers of an e-commerce business. We would like to use historical data to identify any key trends in the business, as well as develop a sales forecast to set goals for the marketing teams.

Sections

1. Clean and explore the dataset.
2. Create a column which tracks the number of non-refunded orders made by a customer in a rolling 90-day window.
3. Create a daily sales forecast by channel for the next 90 days.
   a. Explain which method you chose and why.
   b. Explain how you evaluated your results.
   c. Summarize the accuracy of the forecast.
4. Create a short descriptive analysis of how sales are trending. Feel free to use short descriptions & visualizations to assist the narrative. In total, this narrative should not exceed a single page.
5. Identify 1-2 simple recommendations to business leadership regarding how to potentially increase sales during your forecasted period.

Deliverables

Link to a public GitHub repository containing the following:

- PDF of your short writeup, with visualizations, following the sections noted above.
- Any SQL, Python, or R files used in building your analysis.

Notes

1. Comment your code in a meaningful way.
2. At the end of each section, succinctly summarize your approach and key findings.
3. Feel free to use any library, framework, or tool of choice for any EDA and modeling task, as long as they are well-documented in your program files, documentation, or write-up.