

# Case Study: Online Pharmacy Analytics

## Scenario:

You are a data analyst working for an online pharmacy company. The company has multiple tables containing information about Orders, Pharmacies, Order Items, Order States. Your task is to analyze the data to provide valuable insights to the business and support decision-making processes.

**Dataset attached.**

## SQL Assessment:

### Orders Analysis:

- Retrieve the total number of orders in the dataset.
- List the Order Sources ordered by number of orders.
- Calculate the overall fulfilment rate (Delivered Orders / Total Orders)
- Find the average order value month over month
- Retrieve the number of scheduled orders and their fulfilment rate
- Find the top 3 reasons for not fulfilled orders with their percentages from total orders.

### Products Analysis:

- Identify the top 5 Products with the highest number of orders.
- Identify the top 5 Products with the highest amount of Sales Value.

### Pharmacies Analysis:

- Identify the top 5 Pharmacies based on the number of orders.
- Identify the top 5 Pharmacies based on fulfilment rate.
- For each pharmacy, calculate the total value of sales.
- List all the pharmacies with their customer time (Time between order creation and the last order state) in ascending order
- List all the pharmacies with their delivery time (Time between accepting the order and order delivery) in ascending order
- List the top 5 order states before rejecting the orders (Only for rejected orders) with their total number of orders.

### Task:

1. Perform the SQL queries mentioned above to extract the necessary data for analysis.
2. Share the SQL queries file and include any comments or explanations.

## Tableau Assessment

- You're required to create a dashboard using tableau that summarizes the online pharmacy performance using the attached dataset to highlight the total number of orders, fulfillment rate, sales value, top performing pharmacies and any significant trends of the previously mentioned KPIs in the previous section (SQL Assessment)
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- This task is designed to evaluate your ability to not only analyze data using SQL but also to communicate insights effectively through visualization in Tableau.
- Feel free to leverage the features of Tableau to create interactive and informative visualizations.
- Ensure the dashboard is easily understandable and readily accessible to management for strategic decision-making.

### **Task:**

- Share the SQL queries file and include any comments or explanations.
- Share the dashboard file or a link to the dashboard with the hiring team, along with a brief explanation of the key findings.