

Olist is a Brazilian e-commerce platform that connects small and medium-sized businesses to customers across Brazil. The platform operates as a marketplace, where merchants can list their products and services and customers can browse and purchase them online.

The Olist sales dataset available on Kaggle is a collection of anonymized data about orders placed on the Olist platform between January 2017 and August 2018. It contains a wide range of information about each order, including the order date, product details, payment and shipping information, customer and seller IDs, and customer reviews. The dataset also includes information about the sellers who list their products on Olist, as well as data on customer behavior and demographics. The dataset is designed to help analysts and researchers better understand the e-commerce landscape in Brazil and identify opportunities for growth and optimization.

To help Olist gain better insights into their e-commerce platform and optimize available opportunities for growth, you are to provide answers to the business questions below:

- 1: What is the total revenue generated by Olist, and how has it changed over time?
- 2: How many orders were placed on Olist, and how does this vary by month or season?
- 3: What are the most popular product categories on Olist, and how do their sales volumes compare to each other?
- 4: What is the average order value (AOV) on Olist, and how does this vary by product category or payment method?
- 5: How many sellers are active on Olist, and how does this number change over time?
- 6: What is the distribution of seller ratings on Olist, and how does this impact sales performance?
- 7: How many customers have made repeat purchases on Olist, and what percentage of total sales do they account for?
- 8: What is the average customer rating for products sold on Olist, and how does this impact sales performance?
- 9: What is the average order cancellation rate on Olist, and how does this impact seller performance?.
- 10: What are the top-selling products on Olist, and how have their sales trends changed over time?

11: Which payment methods are most commonly used by Olist customers, and how does this vary by product category or geographic region?

12: How do customer reviews and ratings affect sales and product performance on Olist?

13: Which product categories have the highest profit margins on Olist, and how can the company increase profitability across different categories?

14: How does Olist's marketing spend and channel mix impact sales and customer acquisition costs, and how can the company optimize its marketing strategy to increase ROI?

15: Geolocation having high customer density. Calculate customer retention rate according to geolocations.