

Business Context:

The client is one of the leading online marketplaces in India and would like to partner with Analytixlabs. Client wants help in measuring, managing and analysing performance of business.

Analytixlabs has hired you as an analyst for this project where a client asked you to provide data driven insights about business and understand customer, seller behaviors, product behavior and channel behavior etc...

While working on this project, you are expected to clean the data (if required) before analyzing it.

Available Data:

Data has been provided for the period of Sep 2016 to Oct 2018 and the below is the data model.

Tables:

Customers: Customers information

Sellers: Sellers information

Products: Product information

Orders: Orders info like ordered, product id, status, order dates etc..

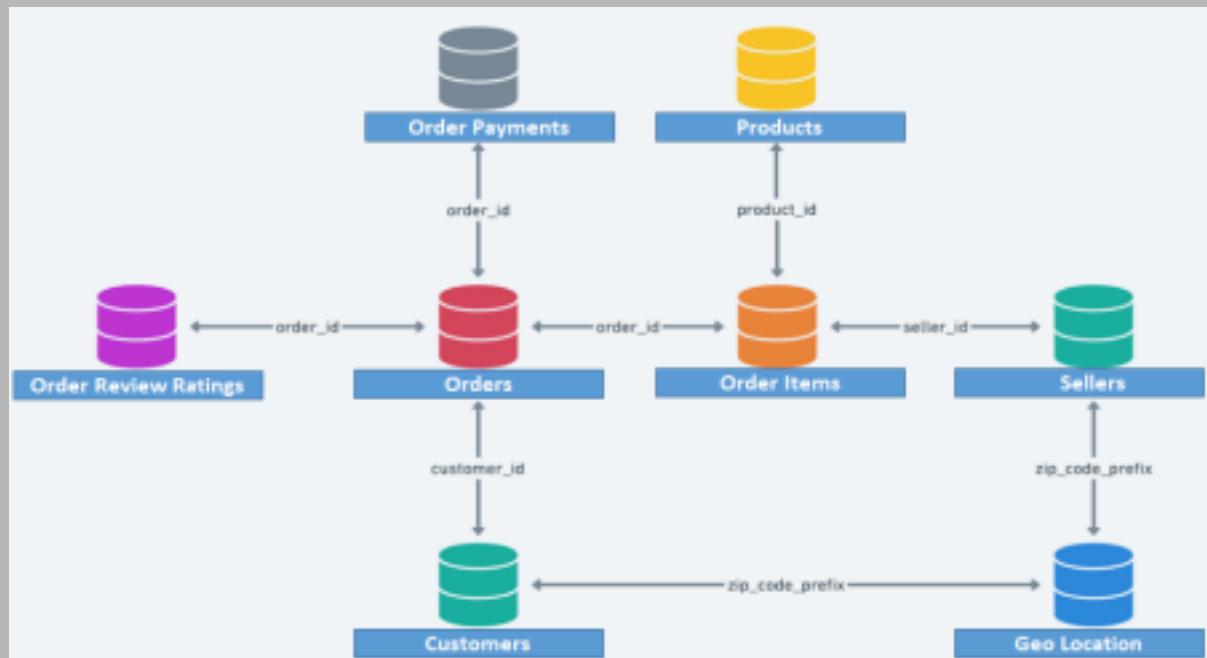
Order_Items: Order level information

Order_Payments: Order payment information

Order_Review_Ratings: Customer ratings at order level

Geo-Location: Location details

Data Model:



Business Problem:

The below are a few Sample business questions to be addressed as part of this analysis. However this is not an exhaustive list and you can add as many as analysis and provide insights on the same.

1. Perform Detailed exploratory analysis

- Define & calculate high level metrics like (Total Revenue, Total quantity, Total products, Total categories, Total sellers, Total locations, Total channels, Total payment methods etc...)
- Understanding how many new customers acquired every month
- Understand the retention of customers on month on month basis
- How the revenues from existing/new customers on a month on month basis e. Understand the trends/seasonality of sales, quantity by category, location, month, week, day, time, channel, payment method etc...
- Popular Products by month, seller, state, category.
- Popular categories by state, month
- List top 10 most expensive products sorted by price

2. Performing Customers/sellers Segmentation

- Divide the customers into groups based on the revenue generated
- Divide the sellers into groups based on the revenue generated

3. Cross-Selling (Which products are selling together)

Hint: We need to find which of the top 10 combinations of products are selling together in each transaction.
(combination of 2 or 3 buying together)

4. Payment Behaviour

- How are customers paying?
- Which payment channels are used by most customers?

5. Customer satisfaction towards category & product

- Which categories (top 10) are maximum rated & minimum rated?
- Which products (top10) are maximum rated & minimum rated?
- Average rating by location, seller, product, category, month etc.