



# Conglomerate Product Supply Control System

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# Problem Statement

As the world is turning into the impacts of COVID-19, online shopping has become the most convenient option for consumers and retailers alike.

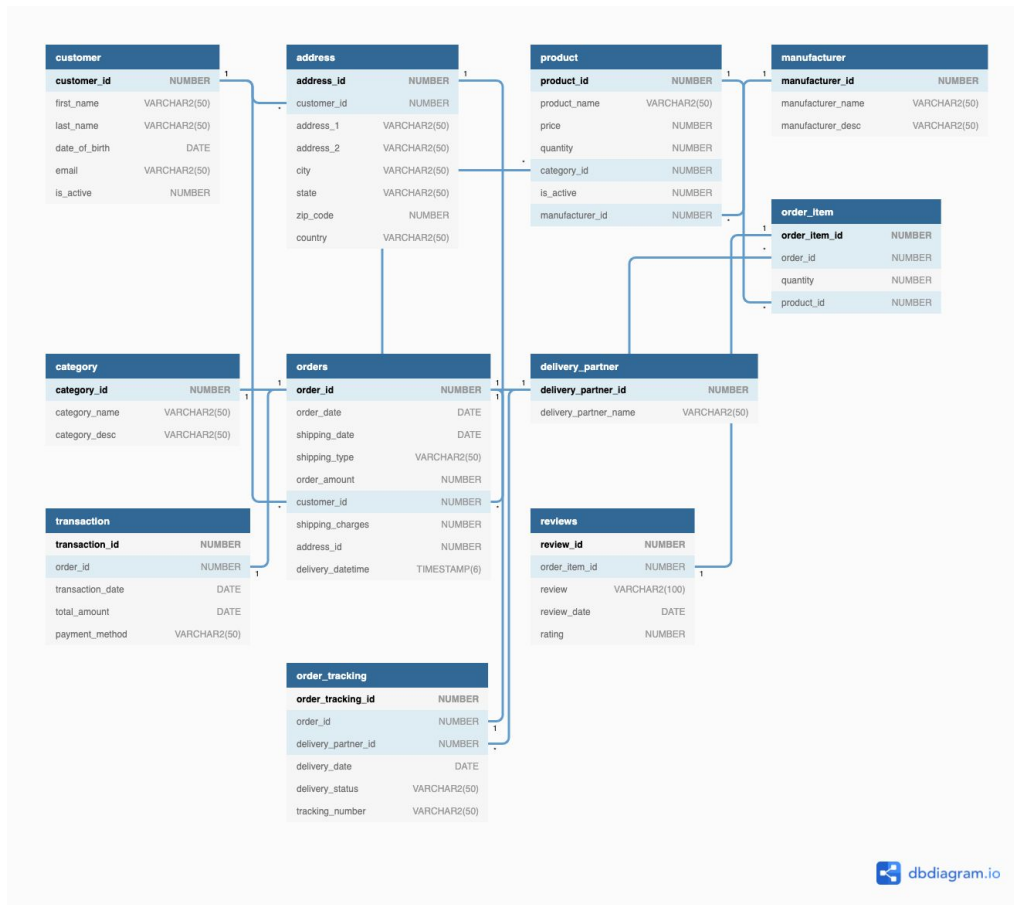
E-commerce represents an advancement in this fast-growing world. Online purchases have gained more presence and curiosity. A prodigious amount of data is provisioned, scaled, and replicated daily. A predictive model is to be designed that can speculate and refine supply chain efficiency by analysing pricing, forecasting trends, and market analysis.



# Objectives

1. To develop easy management of inventory.
2. Ability to checkout products and place the order.
3. Ability to track the order status.
4. Ability to update the product details.
5. Implementation of transaction management to roll back if needed.
6. Ability to review products.
7. Find for recommendations and data analysis.

# ER Diagram





# Topics Covered

1. Tables
2. Views
3. Indexes
4. Triggers
5. Cursors
6. Stored Procedures
7. Functions
8. Packages
9. Type
10. Exception Handling



# Reports

1. Top 3 products sold by quantity per year
2. Top 3 categories of product sold by quantity
3. To view the products low on stock (quantity less than equal 20)
4. Top customers by order amount
5. Total delivery count by delivery vendors
6. Manufacturer's average ratings based on their product reviews
7. To get product recommendation of customers based on their purchase history
8. View all the orders placed across the inventory



## Contributions - Mayank Deshpande

1. Created package and package body structure.
2. Created procedure to create the tables and sequences if doesn't exist and to delete the existing records in case of DML script reran again.
3. Created functions to validate various ids, to fetch the total price of the order items placed and to validate the product quantity before placing the order.
4. Created procedures to handle the orders workflow (creation of order, order items, transaction order tracking records) and to rollback in case of any exceptions.
5. Created 2 views (Manufacturer's average ratings based on their product reviews, orders placed across the inventory)
6. Created a trigger to increase the quantity of the product in case of cancellation.
7. Handled the logic in case the scripts(DML, DDL) reran multiple times.



## Contributions - Dhankuwar Sisodiya

1. Created procedure to create the type and object
2. Created 5 views (Top 3 products sold by quantity per year, top 3 categories of product sold by quantity, get inventory status and manufacture report to view products low on stock, Top customers by order amount, total delivery count by delivery vendors)
3. Created 3 triggers (Update delivery date, update product stock quantity on placing order, Update shipping date)
4. Get product recommendation for user based on previous orders and category using type and object
5. Created function to implement type
6. Created Indexes
7. Procedure - update order tracking status and update product





## Contributions - Butool Abidi

1. Created procedures to insert data into the tables
2. Handled various validations and ensured that the data entered is sensible and feasible.
3. Responsible to create insertion data.
4. Testing of the website which involves checking things such as the schema, tables, or triggers.
5. DML scripts creation and execution which is used to retrieve and manipulate data in a relational database.
6. Created procedure - active/inactive statuses of customer and products that were used for data validation.



**Thank you !**