SQL CASE STUDY

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SQL CASE STUDY-1

Business Context: The objective of case study is to create customer 360 degree view using the above tables (case study-1):

A 360 degree customer view refers to creating a table that has 1 row per customer and includes all known "data-driven" facts about the customer in different columns.

Such a table often forms the basis for all reporting & analysis related to your customer base. As part of this training session, we will define the contents of our 360 degree data table.

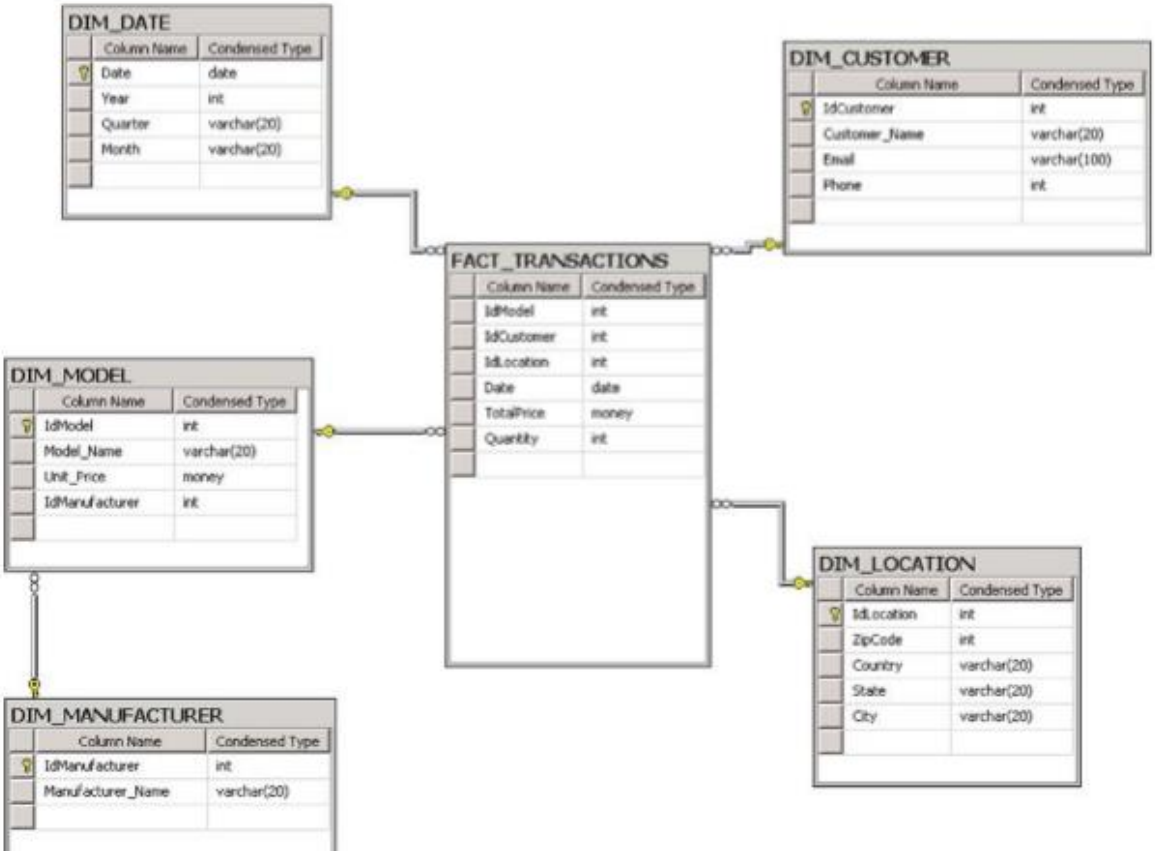
Some of the fields to be included in the customer 360 degree view table are as follows: (you should add atleast another 5 new variable in addition to this list)

Field Name	Data type	Description / Calculation Logic
Customer_id	Same as source table	Primary key for the 360 degree table
Gender	Same as source table	As listed in the customer table
City_code	Same as source table	As listed in the customer table
Age_in_months	Integer	Current Date – Customer DoB from customer table. To be calculated in months
Basket_count	Integer	Count of distinct purchases. Multiple purchases in 1 day count as 1 basket
Total_sale_amt	Integer	Total of net sale amount across the time period (Net value = Amt paid – returns)
Total_sale_qty	Integer	Total of net quantity across the time period (Net qty = Qty purchased – returns)
Unq_cat_cnt	Integer	Unique number of categories customer has ever shopped in.
Unq_sCat_cnt	Integer	Unique number of sub-categories customer has ever shopped in.
Unq_chnl_cnt	Integer	Unique number of channels customer has ever purchased from
Last_trans_date	Date	Latest date on which the customer made a purchase
Avg_basket_qty	Integer	Average quantity the customer purchases in one basket
Avg_basket_val	Integer	Average value of goods that the customer purchases in one basket

SQL CASE STUDY-2

Business Scenario: The database “Cellphones Information” contains details on cell phone sales or transactions. Detailes stored are: Dim_manufacturer, Dim_model, Dim_customer, Dim_Location and Fact_Transactions. The first four store entries for the respective elements and Fact_Transactions stores all the information about sales of specific cellphones.

Data Availability: Assume that, you have given access data base with below schema



Questions:

Write queries to find out the following:

1. List all the states in which we have customers who have bought cellphones from 2005 till today.

2. What state in the US is buying more 'Samsung' cell phones?

3. Show the number of transactions for each model per zip code per state.
4. Show the chepest cellphone

5. Find out the average price for each model in the top5 manufacturers in terms of sales quantity and order by average price.

6. List the names of the customers and the average amount spent in 2009, where the average is higher than 500.00

7. List if there is any model that was in the top 5 in terms of quantity, simultaneously in 2008, 2009 and 2010

8. Show the manufacturer with the 2nd top sales in the year of 2009 and the manufacturer with the 2nd top sales in the year of 2010.

9. Show the manufacturers that sold cellphone in 2010 but didn't in 2009.

10. Find top 100 customers and their average spend, average quantity by each year. Also find the percentage of change in their spend.