Module 7 - Tableau for Data Science

Business Case

Dataset (press CTRL+ CLICK to open the link) : Download

Data Set summary (Source: Superdatascience): Retail data set on customer order details and product sales

Before even starting, install Tableau Desktop public software or Tableau Desktop Enterprise trial version and create your Tableau Public profile and save your workbooks on that platform. This is the first step to project your Tableau skills on the public domain!

https://public.tableau.com/s/

https://public.tableau.com/en-us/s/gallery

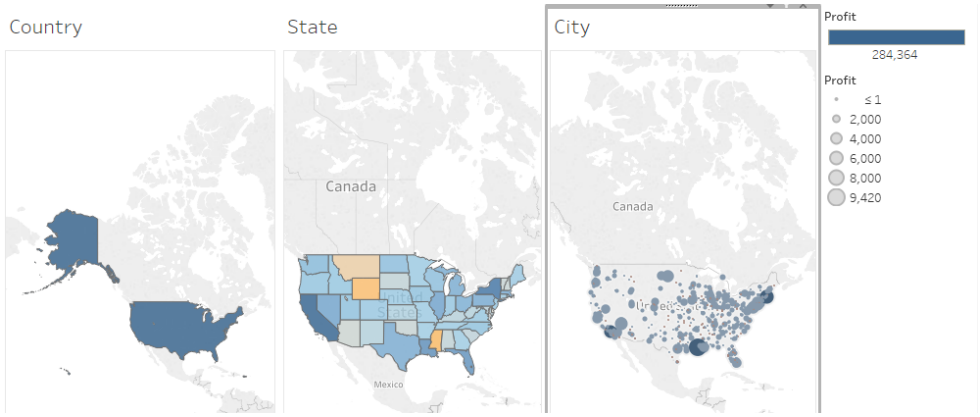
LOD calculations

1. Create an inner join between the worksheets Customer_Orderdetails and Product_Breakdown

2. What do you infer from the inner join, how is it relevant for this data set, in terms of information depicted? Discuss your insights in the class

3. View data on profits observed in each city, using a geographical map. But first, create a hierarchy of geographical dimension data. Country State City Pincode. What do infer from the level of detail information which you observe here in the geo-visualization

4. There are three types of LOD calculations in Tableau: **INCLUDE, EXCLUDE & FIXED**



5. **INCLUDE level calculation** allows you to dig in granular data detail, say in the case dwelling into city level data calculations on actual profits

6. **EXCLUDE level calculation** allows us to move up to higher level of aggregated data, say in this case moving up to the state level of data actual profits. Through Excluding the city dimension.

7. **FIXED level calculation** allows you to select the level of granularity you would like to perform the calculation, you need to explicitly specify the granularity. Something like a writing an excel formula using an absolute dimension value reference.

8. Determine average profit by the city in each state and compare it to average profit by product sold in each state. What do you understand by this question, do you think that a difference in averages exists?

9. Write a LOD Calculation using **INCLUDE** function to determine the sum of the profits by city and average the profits value of the cities in each state using LOD function and compare it with average profits calculated by default

10. How would we use **ATTR** aggregation function? please research

11. Calculate the sum of profits of each state excluding the city level calculation of city level profits using the **EXCLUDE function**

12. Use a filter option to focus on California

13. Calculate the proportion of profits contributed by each city in the state of California

14. Which cities contribute the highest profits (in terms of proportion) to total in the state of Florida

15. Why do we need to take the proportion value?