Ecommerce Sales Project

Application used:

1. SQL
2. Excel
3. Tableau

Project Background:

The online sector has been slowly eating up market share in the past two decades. E-commerce platforms like Unicorn allow people to buy products online: from books, toys, clothes, and shoes to food, furniture, and other household items. Dataset includes Unicorn sales data from the years 2015-2018.

Project objectives:

Analyse the data, find interesting insights and identify weak areas and opportunities for Unicorn to boost business growth:

1. Explore Unicorn data sample organized in a form of a DB with 4 tables. Answer predefined questions with SQL.
2. Explore unified dataset (csv file) in Spreadsheets. Visualize the data and find interesting insights. Create a dashboard that will answer the questions provided.
3. Use Tableau to perform exploratory data analysis and find a unique insight from the data set. Create a dashboard that will present the finding in a dynamic way.

Project data:

Unicorn DB Schema that includes 4 tables with the structure and csv files with data from all 4 tables: customers.csv ,product.csv , orders.csv, order\_details.csv.

SQL querying:

1. How many Customers do we have in the data?
2. What was the city with the most profit for the company in 2015 and how much was it?
3. How many different cities do we have in the data?
4. Show the total spent by customers from low to high.
5. What is the most profitable City in the State of Tennessee?
6. What’s the average annual profit for that city across all years in that city?
7. What is the distribution of customer types in the data?
8. What’s the most profitable product category on average in Iowa across all years?
9. What is the most popular product in that category across all states in 2016?
10. Which customer got the most discount in the data? (in total amount)
11. How widely did monthly profits vary in 2018?
12. Which order was the highest in 2015?
13. What was the rank of each city in the East region in 2015?
14. Join all DB tables into one dataset that includes all unique columns and download it as a csv file.

Excel:

1. Create a “Profit per year” dashboard, all the data should change dynamically.
2. Dashboard should contain at least the following:
   1. A histogram of the profit column with a bucket size of 20 and an outlier percentile of 5%
   2. A chart that shows the profit over the months (you could do a line chart or a waterfall chart)
   3. Top 5 profitable subcategories
   4. Bottom 5 profitable subcategories
   5. Top 10 profitable customers
   6. Bottom 10 profitable customers
   7. Sum of positive profit
   8. Sum of negative profit
   9. Number of distinct orders

Tableau:

This part of the project is open-ended. Its goal is to communicate your insights clearly, about the data to the Unicorn's executive team with the help of the created dashboards.