Uber Data Analysis

Abstract:

Uber is an international company located in 69 countries and around 900 cities around the world. Lyft, on the other hand, operates in approximately 644 cities in the US and 12 cities in Canada alone. However, in the US, it is the second-largest passenger company with a market share of 31%.

From booking a taxi to paying a bill, both services have similar features. But there are some exceptions when the two passenger services reach the neck. The same goes for prices, especially Uber's "surge" and "Prime Time" for Lyft. There are certain limitations that depend on where service providers are classified.

Many articles focus on algorithm/model learning, data purification, feature extraction, and fail to define the purpose of the model. Understanding the business model can help identify challenges that can be solved using analytics and scientific data. In this article, we go through the Uber Model, which provides a framework for end-to-end prediction analytics of Uber data prediction sources.

Existing System:

In the existed system, lot of analysis is been happened on the data and in the initial days the data analysis was not accurate as the data size is small but now it was emerged like anything which was not like same as few years ago.

Proposed System:

Uber has emerged as a leading company in the provision of new transportation options within the contemporary world. Uber, then, is primarily in the business of networking, and all the company's emerging operations can be conceptualized in terms of simply providing a medium through which the relevant supply can meet up with the relevant demand. Analytics is a tremendously growing niche that people apply in their businesses to give it a boost. This is more of a data visualization project that will enhance our knowledge towards using the ggplot2 library for understanding the data and for developing an intuition for understanding the customers who avail the trips Solution to this issue is understanding what Customer segmentation (aka Market Segmentation).

Customer segmentation can be explained as a game where a kid separates balls, cubes based on their shape or colors. In simple language customer segmentation is segregating customers, market on different criteria and dividing them on the basis of various characteristics. The Uber data is not as detailed as the taxi data, in peculiar Uber provides time and location for pickups only, not drop-offs, but I wanted to provide an amalgamated dataset including all available taxi and Uber data. Uber analyses historical data for say, last 3 or 4 weeks and identifies pockets within the city that witness extremely high demand. To grow business with this competitive environment data analysis is necessary. Data analysis reports, and other kinds of analysis and

report documents must be developed by businesses so that they can have references for peculiar activities and undertakings especially when making decisions for the future operations of the company.

Software Tools:

- 1. VS Code
- 2. Jupyter Notebook
- 3. Anaconda
- 4. Scikit-Learn
- 5. Pandas
- 6. Seaborn
- 7. Ggplot2
- 8. Matplotlib
- 9. NumPy
- 10. Heroku

Hardware Tools:

- 1. Laptop
- 2. Operating System: Windows 11
- 3. RAM: 16GB
- 4. ROM: 4GB
- 5. Fast Internet Connectivity