A New Hint to Transportation-Analysis of the NYC Bike Share System

COLLEGE: GOVERNMENT COLLEGE OF TECHNOLOGY, COIMBATORE

TEAM LEADER: DHARUN D -1914502

TEAM MEMBERS:

SRI GOKUL E -1914502 ARUN M -1914L02 ASHWIN KUMAR E -1914L03

Abstract:

The Citi Bike deployment changes the landscape of urban mobility in New York City and provides an example of a scalable solution that many other large cities are already adopting around the world. Urban stakeholders who are considering a similar deployment would largely benefit from a quantitative assessment of the impact of bike sharing on urban transportation, as well as associated economic, social and environmental implications. While the Citi Bike usage data is publicly available, the main challenge of such an assessment is to provide an adequate baseline scenario of what would have happened in the city without the Citi Bike system.

Existing efforts, including the reports of Citi Bike itself, largely imply arbitrary and often unrealistic assumptions about the alternative transportation mode people would have used behavior in the absence of the Citi Bike system. Besides estimating the travel time and cost savings, the model also reports the associated gas savings, emissions cut and additional exercise for the customers, covering all three areas of anticipated impacts - economic, social and environmental.

OBJECTIVES:

The goal of this analysis is to create an operating report of Citi Bike for the year 2018. Let us create data visualizations to understand

- 1.) Total Number of Trips
- 2.) What is Customer and subscriber with gender
- 3.) Find the top bike used with respect to trip duration?
- 4. Calculating the number of bikes used by respective age groups.
- 5.) Top 10 Start Station Names with respect to Customer age group

ADVANTAGES:

- Gas saved translated into saved emissions (environmental)
- Calories burnt by individuals, which improves public health (social)
- Increase in commercial activity for local businesses (economic)

DISADVANTAGES:

- Poor Quality of Data
- Lack of proper source of data
- Complexity & Bias