

A New Hint To Transportation - Analysis Of The NYC Bike Share System

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Abstract:

- Bike share programmes have grown in popularity in recent years, and they are marketed as a low-carbon alternative to other modes of transportation.
- Over the last decade, interest in bicycle sharing has grown exponentially, resulting in the proliferation of bike share systems in 712 cities around the world, totaling 806,000 bicycles and 37,500 stations.
- This can be attributed in large part to the successful integration of information technology in docking stations and mobile devices, as well as improved logistics such as bicycle rebalancing to ensure responsive supply management.
- Cities frequently hope that bike sharing will provide numerous benefits, such as extending the reach of public transportation, substituting motorised trips, and encouraging non-cyclists to try cycling.

Literature Survey

- **NYC Bike Share System:**
 - New York City is the most populous city in the United States. It has more people than 40 states combined. Aside from New York City residents, a sizable number of people commute into the city from neighbouring counties and states. New York has one of the world's largest Commuter-Adjusted Daytime Populations, despite having one of the most developed public transportation systems (it has the largest subway system). In 2013, the New York City subway system delivered an estimated 5.5 million rides on weekdays. The commute in New York City is also regarded as the worst in the country. New York's average commute time is 40 minutes longer than the national average. Anyone who has used the 4/5/6 or 2/3 subway lines can attest to this. Since 2013, an alternate commuting option is being offered in New York city; a paying bike sharing system "Citibike".

- **Data**

- We use data from the New York City bike sharing programme for this investigation. The docking stations keep track of each bike's ride information, which is then cleaned up, organised, and made accessible to the general public. All rides taken by "subscribers" (riders who pay annually and for whom additional demographic information is tagged with ride information captured by the docking stations) in 2018 are the specific topic of this study. When a subscriber registers, they are asked to supply further information, primarily their gender and dob, which are then recorded.

- **Impact of Bike Share System in NYC**

- *Social Impact*
 - Reduce the traffic & environment friendly.
- *Business Model/Impact*
 - Government can promote environment friendly bicycles.
 - Fitness companies can run campaigns to target the right customers.

- **Goal of this analysis**

- Seeking to reduce carbon emissions and increase active travel, U.S. cities have increasingly adopted bike-sharing systems in recent years .
- Bike sharing system have become increasingly popular in many cities. These services allow users to rent bikes for utilitarian and recreational trips in the urban area.
- Bike sharing has been considered a suitable mode to support the firstand last-mile connectivity problems of fixed-route transit services.

References:

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