



Public Bike Sharing Analysis Report

CodEvo Solutions

By Aakanksha

ID- x4dqu43j

Data Science Intern @CodEvo Solutions
aakankshakhushi04@gmail.com

Overview-

- The image presents data visualizations related to bike-sharing usage over two years (2011 and 2012). The dataset was provided by Kaggle.
- It covers aspects like the number of riders per month, seasonal trends, daily counts on different types of days, and usage by casual versus registered users.
- The data could be valuable for urban planning, environmental studies, and bike-sharing service optimization.

Key Insights-

- 1) Total Rider Count:
 - The total number of riders is 3 million. This is the total number of bike-sharing users across all periods.
- 2) Seasonal trends:
 - Fall is the most popular season for bike-sharing, with the most riders.
 - Winter shows a major drop in the number of riders, which might be due to colder weather conditions reducing consumer interest.
 - Spring and summer have moderate consumption, but less than fall.
- 3) Monthly Usage:
 - Riders count often spikes during the middle of the year, with maxima seen in June, July, and August in both 2011 and 2012.
 - The data also shows a seasonal drop in usage during January and February, most likely because of colder winter conditions.
- 4) Casual vs. Registered Users:
 - Registered users account for a bigger share of the rider population than casual users, indicating the presence of a more constant and frequent rider base, most likely consisting of everyday travelers.
 - Casual users are in the minority, which can indicate that they ride only sometimes or on weekends.
- 5) Weather Impact:
 - Clear or partially cloudy skies attract the most riders.
 - Misty weather or light precipitation affects the number of riders; however, some riders continue to ride in these conditions, demonstrating that weather does not completely eliminate usage, but rather reduces it.
- 6) Holiday Vs. Non-Holiday Usage:
 - The vast majority of bike-sharing trips take place on non-holidays, showing that the service is more commonly used for everyday commuting or work-related travel than for recreational purposes.

Limitations-

- The dataset contains data for only two years, 2011 and 2012. Insights derived may not reflect long-term trends in bike-sharing habits.
- There is a visible year-to-year fluctuation, but additional years of data could give a better understanding of evolving trends and behaviors.
- Predicting daily demand accurately for resource allocation may be challenging.

Links-

Github Repo Link

<https://github.com/aakanksha1406/CodeEvo-Solution-DA/blob/main/public%20bike%20sharing%20analysis.pbix>