Description of Capital Bike Share Data

The bike-share industry is rapidly becoming popular as a primary use of transportation, especially in urban areas and campuses. In the past, people cycled primarily as a form of sport or exercise, but now, households and individuals make use of bicycles to transport themselves.

Due to the pandemic, the bike-share industry experienced a decline in the number of bike-share customers, leading to a huge dip in revenue, but it is now gradually recovering as cities and businesses reopen. Research on bike and scooter rental markets predicts that the revenue for the bike-share industry will increase from $2.5 billion in 2019 to $10.1 billion in 2027, which is due to people's need for easy commuting and increasing use in the food delivery industry to avoid traffic.

Bearing the high initial capital expenditure and ongoing depreciation expense, the bike-sharing companies are facing risks of loss and a problem with how to maximize allocation efficiency to gain profits.

Content

The dataset is inspired by the past Bike Sharing Demand Competition. The data is hourly from 2018.1.1 to 2021.08.31. Data for 2020 April is missing since Capital Bikeshare does not provide the information on its website.

- DateTime: Date and hour of the bike share data
- count: Count of total rentals
- holiday: Whether it is a holiday
- workingday: Whether it is a working day (Mon-Fri except for holiday)
- temp: Temperature in Celsius
- feels_like: "Feels like" Temperature in Celsius
- temp_min: Lowest temperature
- temp_max: Highest temperature
- pressure: Air pressure
- humidity: Relative humidity
- wind_speed: Wind speed
- wind_deg: Wind direction degree
- rain_1h: Precipitation in the last 1 hour (missing when it did not rain)
- snow_1h: Snow volume for the last 1 hour (missing when it did not snow)
- cloud_all: Cloudiness in percentage
- weather_main: Weather types (Rain, Snow, Extreme, etc.)

https://www.kaggle.com/datasets/vivianyfwang/capital-bike-share-2018-20218