

Effects of user characteristics on Ford Go-Bike rent duration

Investigation Overview

This investigation aims to analyze the main user characteristics that impacts duration of riding Ford Go-Bike.

DataSet Overview

This DataSet contains 183412 samples for Ford Go-Bike, each sample has 16 features which as made in 2019. Some of these features are replaced with other features for better Visulaization, as

"duration_sec" to "duration_min"
"member_birth_year" to "member_age"
"start_time" to "hour_start" & "day_start".

Besides that some of NaN values are dropped reaching at the end a dataset with shape 171305 samples x 20 features.

Summary of findings

Univariate Findings

- Avg Duration of user riding bikes is about 11 min.
- Subscriber user types are much more than Customers with portion 91%.
- Males percentage riding bikes is greater than females with value 76%.
- Top station where ride is started at Market St at 10th
- Top station where ride is ended at San Francisco Caltrain Station 2.
- Most Day where rides are made is Thursday.
- Most hour where ride is started is at 7 & 16.

Bivariate Findings

- Most frequent users age in riding bikes is in range 25-40 years making an avg duration 100 min.
- Age of 30 years specially makes high contribution in riding bikes with duration avg 150 min.
- Females make higher avg duration than Males, although portion of males is greater.
- Customers make higher avg duration than Subscribers, although portion of Subscribers is greater.
- In all days of the week, bikes are mostly used at 8 & 17, except at Sunday & Saturday.
- Duration usage at Saturday & Sunday reach higher values than other days.

Multivariate Findings

- In Friday, almost all user ages makes high contribution in riding bikes making an avg duration of about 200 min.
- In high age users, most day were bikes are used is Friday.
- At age of 30 there is somehow a spike in duration made reaching about 300 min in Friday.
- In all days of the week, Females make higher avg duration compared to males although portion of males is greater.
- In all days of the week, Customers make higher avg duration compared to Subscribers although portion of Subscribers is grater specially in Sunday & Saturday.

Key Insights for Presentation

- Young people are likely to use the bike for a relatively long duration.
- Compared to the subscriber, the customer has a higher duration.
- Female has a higher duration than the male.
- Prople are likely to use bikes for going to work & for schedule events rather than using it for fun.

Recommendations

It is recommended that Ford GoBike can take marketing efforts to attract customers to become subscribers to enhance the user loyalty. The future market can target the other as a potential.