Bike Share Analysis

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Tidyverse and data Importation

After Data Cleaning on spreadsheets, my data was transferred to R program for further analysis, this was done after the installation and loading of tidyverse package.

The Dataset was retrieved from Motivate International Inc. Which is an Open Source.

```
library("tidyverse")

## -- Attaching packages ------------------------------------- tidyverse 1.
3.1 --

## v ggplot2 3.3.5     v purrr   0.3.4
## v tibble  3.1.6     v dplyr   1.0.8
## v tidyr   1.2.0     v stringr 1.4.0
## v readr   2.1.2     v forcats 0.5.1
```

Data Manipulation

Data was trimmed to get the required columns to solve the business problem, this was followed by filtering and sorting of data to keep it in a understandable format.

```
bike_data<-read.csv(choose.files())
bike_filtered<- bike_data%>%select(start_station_name,member_casual)
bike_rename<- bike_filtered%>%rename(membership_type=member_casual)
bike_filtered2<-bike_rename%>%filter(membership_type=="casual")
bike_summary<-bike_filtered2%>%group_by(start_station_name)%>%count(membershi
p_type)
bike_rename2<-bike_summary%>%rename(number_riders=n)
bike_arrange<-bike_rename2%>%arrange(-number_riders)
Bike_final<-bike_arrange%>%filter(number_riders>=176)
```

Data summary and Viz

The summary of data focused on identifying the start station names with the most number of casual riders. By identifying these locations, it will be easier to allocate all marketing and advertising resources to these locations, so as to convince a large number of audiences to subscribe for membership package.

The table below shows the top six start station with most of casual rider.

```
   Start station name          membership type        number of riders

1 Clark St & Elm St              casual                    246
2 Wabash Ave & Grand Ave         casual                    206
3 Desplaines St & Kinzie St      casual                    204
4 Wells St & Huron St            casual                    204
5 Clark St & Lincoln Ave         casual                    199
6 Wells St & Elm St              casual                    195
```

From the above table, six start station with most of ==casual riders (1254)== out ==of 23628 total casual riders== around 568 available start stations were highlighted. These six stations out of 568 stations constitutes ==5.3% of total casual riders==.

Furthermore, the bike share company is doing great so far, because most of its customers have membership subscription as outlined by the pie chart below;

72.1% are member riders.

Member riders Vs Casual rider

Casual riders
27.9%

Casual riders

Member riders

Member riders
72.1%