

Case study

How Does cyclistic Bike-Share Navigate Speedy Success?

Stage 1

Business understanding

Cyclistic is bike sharing company based on Chicago it has 5,824 bicycles that are geo tracked and locked into a network of 692 stations. cyclistic has two kind of customers casual riders who purchase bike for single ride or full day pass and another kind of customer is member rider who purchase annual membership

Business task

Cyclistic's finance analysts have concluded that annual members are much more profitable than casual riders. Although the pricing flexibility helps Cyclistic attract more customers, Moreno(The director of marketing) believes that maximizing the number of annual members will be key to future growth. Rather than creating a marketing campaign that targets all-new customers, Moreno believes there is a very good chance to convert casual riders into members.

Breaking down business task into problem statement for further understading

Three questions will guide the future marketing program

1. How do annual members and casual riders use Cyclistic bikes Differently?
2. Why would casual riders buy Cyclistic annual memberships?
3. How can Cyclistic use digital media to influence casual riders to become members?

Problem assigned us to solve

How do annual members and casual riders use Cyclistic bikes differently?

Stage 2

Prepare data for exploration

After understanding business task we move to colect,organize,store and check the crediblity of data

Key task of prepare stage

- 1.Download data and store it appropriately.
- 2.Identify how its organized.
- 3.Short and filter data
- 4.Determine the credibility of data

Download data and store it appropriately

Cyclistic Recent 12 month bike ride data has been downloaded from here

<<https://divvy-tripdata.s3.amazonaws.com/index.html>>

Data has been stored properly on respective path

C:\Users\sachi\OneDrive\Desktop\Case Study_Bike_Share\Bike_Share_12_month_data\Original_data_files

Identify how data is orgenized need to import data sets into power bi

I have inspected dataset before importing to power bi they are good to combine together so have imported entire folder which consist datasets

Combining datasests

All imported datasets combined with the help of power query

Determine the credibility of data we use ROCCC method to identify data credibility

R & O - Reliable and original: Data is originaly collected by cyclistic its primary source and original

C-Comprehensive : Data has important formation to solve problem so its comprehensive

C- Current : Data is not outdated its current data

C- Cited : As data is maintained and trusted by cyclistic its cited data

Stage 3

Process

Process stage is very important in data analytics because here data will get cleaned and transpormed for analysis stage clean and transpormed data is key for accurate analysis

Key tasks of process stage

1. Check for errors in data

Data set has no error

- 2.Check for duplicate data

Dataset has no duplicate values

- 3.Treat null values

Dataset has null values but that columns are not affecting our analysis

- 4.Orgenize and format data

Nothing to formate any data type or orgenize then

- 5.perform calculations

Ride_duration_hour column created by substracting column ended_at from started_at and converted column duration to hors

- 6.Derived metrics or new metrics

New column Day name and weekend_weeekday column created using information of started_at

Stage 4

Analyze

Analyse is detective kind of task in data analysis journey. During analysis we will discover trend,pattern and relation in dataset Our analyze step should move with considering our business task understand difference between casual rider and member rider

Key findings from analyze

During the analysis we found below differences between casual and member riders

- 1.Cyclistic has more member riders than casual riders
- 2.Casual riders ride duration is higher than member riders
3. During weekend(friday,saturday,sunday) casual riders are more active than member riders
4. Any promotional activity towards casual riders from may to Sept is better period
5. Casual rider use docked_bike but no member riders use this

Stage 5

Share

Power BI report has beed developed to the findings

Stage 6

Act

Act is stage of of data analytics with the help of insights we will recommend next steps

Below are the recommendation of cyclistic company from insights

1. As data clearly days casual riders use bikes during weekend more than member riders , company can use this point to provide them yearly pass for weekend rides.
2. As casual riders are riding bike for longer duration company can come up with different strategy to support this pattern

Is more data required?

yes, we require data demogafic data of customer to target casual rider who fall under member rider character and convert then to member