# Project 1

Data analyst: Nguyen Duc Khuong Duy

Type: Personal project

Name: Project 1 – Cyclistic Bike

# Scenario

You are a junior data analyst working in the marketing analyst team at Cyclistic, a bike-share company in Chicago. The director of marketing believes the company’s future success depends on maximizing the number of annual memberships. Therefore, your team wants to understand how casual riders and annual members use Cyclistic bikes differently. From these insights, your team will design a new marketing strategy to convert casual riders into annual members. But first, Cyclistic executives must approve your recommendations, so they must be backed up with compelling data insights and professional data visualizations.

Cyclistic: A bike-share program that features more than 5,800 bicycles and 600 docking stations. Cyclistic sets itself apart by also offering reclining bikes, hand tricycles, and cargo bikes, making bike-share more inclusive to people with disabilities and riders who can’t use a standard two-wheeled bike. The majority of riders opt for traditional bikes; about 8% of riders use the assistive options. Cyclistic users are more likely to ride for leisure, but about 30% use them to commute to work each day.

About the company  
 In 2016, Cyclistic launched a successful bike-share offering. Since then, the program has grown to a fleet of 5,824 bicycles that are geotracked and locked into a network of 692 stations across Chicago. The bikes can be unlocked from one station and returned to any other station in the system anytime.  
 Until now, Cyclistic’s marketing strategy relied on building general awareness and appealing to broad consumer segments. One approach that helped make these things possible was the flexibility of its pricing plans: single-ride passes, full-day passes,  
and annual memberships. Customers who purchase single-ride or full-day passes are referred to as casual riders. Customers who purchase annual memberships are Cyclistic members. 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 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. She notes that casual riders are already aware of the Cyclistic program and have chosen Cyclistic for their mobility needs.  
 Moreno has set a clear goal: Design marketing strategies aimed at converting casual riders into annual members. In order to do that, however, the marketing analyst team needs to better understand how annual members and casual riders differ, why  
casual riders would buy a membership, and how digital media could affect their marketing tactics. Moreno and her team are  
interested in analyzing the Cyclistic historical bike trip data to identify trends.

# Purpose

- Conduct analysis to define patterns and correlation.

- Gain insight into 12 months dataset then present it to the marketing team

- Highly give recommendations for the marketing team to execute a new marketing strategy

# Findings

- Casual riders and annual customers have no difference in started and ended hours in their trips

- Number of casual riders is more than the number of annual customers

- The average distance of each trip of casual riders is more than annual customers

- The average time per trip of casual riders is even more than annual customers

- The casual riders are more likely to ride on the weekend when annual customers have demand consistently during all the weekdays.

- Casual riders have popular routes, started location and end location

# Recommendations

- Giving discount for customer who newly joins as an annual member

- Running ads strategy in specified routes, docking locations where are popular routes of casual riders

- Run ads more on the weekend

# Further analysis

This analysis still cannot answer some questions:

- Are casual riders bike in their leisure on the weekend?

- Why casual riders don’t join as an annual member when they bike even more than an annual member?

- The average cost of casual riders and annual member pay for each hour ride bike?

The data I have can’t answer those questions, so we need more analysis and data to gain insights