# Project Requirements Document: Cyclistic

## **BI Analyst:** Vladislav Plyusnin

## **Client/Sponsor:** Cyclistic, Jamal Harris, Director, Customer Data

## **Purpose:**

## Cyclistic’s Customer Growth Team is creating a business plan for next year. The team wants to understand how their customers are using their bikes; their top priority is identifying customer demand at different station locations. The dataset includes millions of rides, so the team wants a dashboard that summarizes key insights. Business plans that are driven by customer insights are more successful than plans driven by just internal staff observations. The executive view must include key data points that are summarized and aggregated in order for the leadership team to get a clear vision of how customers are using Cyclistic.

## **Key dependencies:**

## This project will require a dataset of customer data, so the Jamal Harris (Director of Customer Data) will need to approve the request. Approval should also be given by the teams that own specific product data including bike trip duration and bike identification numbers to validate that the data is being interpreted correctly. The primary contacts are Adhira Patel, Megan Pirato, Rick Andersson, and Tessa Blackwell.

## **Stakeholder requirements:** (List the established stakeholder requirements, based on the Stakeholder Requirements Document. Prioritize the requirements as: R - required, D - desired, or N - nice to have.)

To enhance product development and marketing strategies, it is essential for the dashboard to assist Cyclistic decision-makers in gaining a comprehensive understanding of customer bike usage and demand across various locations. Additionally, the dashboard should provide insights into the factors that can potentially influence demand fluctuations over different time periods.

A table or map visualization exploring starting and ending station locations, aggregated by location. R

● A visualization showing which destination (ending) locations are popular based on the total trip minutes. R

● A visualization that focuses on trends from the summer of 2015. D

● A visualization showing the percent growth in the number of trips year over year. R

● Gather insights about congestion at stations. N

● Gather insights about the number of trips across all starting and ending locations. R

● Gather insights about peak usage by time of day, season, and the impact of weather. R

## **Success criteria:**

**Specific:**

BI insights should possess the ability to clearly identify the specific attributes that contribute to a product's success. They should effectively showcase the current patterns of bike usage by customers and provide an understanding of the factors that influence demand at different station locations.

**Measurable:**

It is crucial to evaluate each trip by considering various factors, such as the starting and ending location, duration, as well as variables like time of day, season, and weather. By analyzing these aspects, it becomes possible to uncover insights regarding customer behavior.

**Action-oriented:**

The objective of analyzing the outcomes is to either validate or refute the theory that user demand is influenced by location, time, season, and weather. The findings derived from this analysis will be instrumental in refining future product development strategies for Cyclistic.

**Relevant:**

All metrics and analyses should be aligned with the primary question: "How can we build a better Cyclistic experience?"

**Time-bound:**

To gain insights into how seasonality impacts usage patterns, it is crucial to analyze data spanning at least one year. By examining data over multiple months, it becomes possible to capture the fluctuations in usage, including both the peaks and valleys.

## **User journeys:**

## The main purpose of Cyclistic is to provide customers with a better bike-share experience. A deeper-dive into trip trends will help decision-makers explore how customers are currently using Cyclistic bikes and how that experience can be improved.

## **Assumptions:**

The dataset includes latitude and longitude of stations but does not identify more geographic aggregation details, such as zip code, neighbourhood name, or borough. The team will provide a separate database with this data.

The weather data provided does not include what time precipitation occurred; it’s possible that on some days, it precipitated during off-peak hours. However, for the purpose of this dashboard, I should assume any amount of precipitation that occurred on the day of the trip could have an impact.

Starting bike trips at a location will be impossible if there are no bikes available at a station, so we might need to consider other factors for demand.

## **Compliance and privacy:**

The data must not include any personal info (name, email, phone, address). Personal info is not necessary for this project. Anonymize users to avoid bias.

## **Accessibility:**

Stakeholders should have data access to all datasets. Dashboard needs to be accessible, with large print and text-to-speech alternatives.

**Roll-out plan:**

* Week 1: Dataset assigned. Initial design for fields and BikeIDs validated to fit the requirements.
* Weeks 2–3: SQL and ETL development
* Weeks 3–4: Finalize SQL. Dashboard design. 1st draft review with peers.
* Weeks 5–6: Dashboard development and testing