Project Requirements Document: Cyclistic Bike Share

## **BI Analyst:** MaheshKarthika

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

## **Purpose:** Cyclistic’s Customer Growth Team is creating a business plan for next year to increase Cyclistic’s Customer Base. The team wants to understand how their customers are using their bikes; their top priority is identifying customer demand at different station locations.

## **Key dependencies:**

**Stakeholders:**

* Sara Romero, VP, Marketing
* Ernest Cox, VP, Product Development
* Jamal Harris, Director, Customer Data
* Nina Locklear, Director, Procurement

**Team members:**

* Adhira Patel, API Strategist
* Megan Pirato, Data Warehousing Specialist
* Rick Andersson, Manager, Data Governance
* Tessa Blackwell, Data Analyst
* Brianne Sand, Director, IT
* Shareefah Hakimi, Project Manager

\*Primary contacts are Adhira, Megan, Rick, and Tessa.

**Project approvals and dependencies:**

The datasets will include customer (user) data, which Jamal will need to approve. Also the project might need approval by the teams that own specific product data, including bike trip duration and bike identification numbers. So I need to make sure that stakeholders have data access to all datasets.

**Stakeholder requirements:** ( R - required, D - desired, or N - nice to have.)

* R: 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.
* R: A visualization showing the percent growth in the number of trips year over year.
* N: Gather insights about congestion at stations.
* R: 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.

## **Success criteria:**

**Specific:** BI insights should clearly identify the required details about ‘how the customers are using the bikes; and the customer demand at different station locations’ to make the product successful.

**Measurable:**

Evaluate each trip on the number of rides per starting location and per day/month/year to understand trends. For example, do customers use Cyclistic less when it rains? Or does bikeshare demand stay consistent? Does this vary by location and user types (subscribers vs. nonsubscribers)?

**Action-Oriented:** These outcomes would provide details to find out more about what impacts customer demand. Then the Cyclistic team uses this information to develop the product.

**Relevant:** All metrics must support the primary goal ‘ How to grow Cyclistic customer base’.

**Time-bound:**

Analyze data that spans at least one year to see how seasonality affects usage. Exploring data that spans multiple months will capture peaks and valleys in usage.

## **User journeys:** The main purpose is to provide customers with better experience and grow the customer base. Detailed understanding of the bike trends will help the decision makers to understand how customers are using their bikes and their demands at different station locations currently and how it can be improved in future.

## **Assumptions:**

## The dataset includes latitude and longitude of stations but does not identify more geographic aggregation details, such as zip code, neighborhood 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 and protect their privacy.

## **Accessibility:**

**People with dashboard-viewing privileges:**

Adhira, Brianne, Ernest, Jamal, Megan, Nina, Rick, Shareefah, Sara, Tessa

**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