Project Requirements Document: Cyclistic

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Client/Sponsor: 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 summary 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: The datasets include customer (user) data, which the Director of customer data 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.

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

Stakeholder requirements:

To improve and grow Cyclistic's Customer Base the dashboard will help to gain insight of the data and to make decisions quickly and accurately.

- A table or map visualization exploring starting and ending station locations, aggregated by location. I can use any location identifier, such as station, zip code, neighborhood, and/or borough. This should show the number of trips at starting locations. -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. - 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. - R

Success criteria:
The goal is to grow Cyclistic's Customer Base. To do so a good Cyclistic experience is essential. So all the metrics should correspond to the fact How to build a good Cyclistic experience?

- **Specific :** How each starting and ending location impacts the number of the trips or how successful the product is based on the location.
- **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
- **Action :** The outcomes must prove that variables like weather, season , location or etc. must impact the customer need

By analyzing the customer's needs the following improvement can be done.

User journeys: To achieve the goal a good Cyclistic experience is essential. The deep dive on the customer data will clearly help to make decisions and gain information on how customers use 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, 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 data such as name, email address, phone number, or physical address. The user provides this data as part of their device activation but is not necessary for this project. It is paramount that the users be anonymized to avoid any bias.

Accessibility: The dashboards should offer text alternatives including large print and text-to-speech.

Roll-out plan:

The stakeholders have requested a completed BI tool in six weeks:

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